









## EXPLANATORY.

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The pagination of each Division is separate, and is given at the left-hand top corner of the pages. The number and name of the Division is given as a heading on each left-hand page. The Registration Numbers when of importance are given at the right-hand top corner of the right-hand pages. The date 1920 corresponding to the bulk of the literature indexed is given at the right-hand top corner of the left-hand page.

In the Subject Index of each Division authors are quoted by name only. The full references will be found in the Title Section of the Division.

The Literature indexed is mainly that of 1920 but includes entries for earlier years that have been received too late for inclusion in previous volumes.

On account of the international situation, the Royal Society of London found itself unable to undertake at present any financial responsibility for any volumes of the International Catalogue subsequent to those of the Fourteenth Annual Issue.

Under these circumstances the Zoological Society of London arranged to undertake the issue of the present volume, which is the fifty-seventh of the Zoological Record, and would have been N. Zoology of the Twentieth Annual Issue of the International Catalogue. Its preparation has been conducted as closely as possible on the model of the previous volumes prepared jointly by the International Catalogue and the Zoological Society.

It can now be purchased from the Zoological Society of London at the price of £2, either in the binding of the Zoological Record or in series with the International Catalogue.

Volume 58, dealing with the Literature of 1921, is in preparation; it will be printed and issued if the replies to the explanatory circular issued to subscribers encourage the Society to undertake the heavy financial responsibility.



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# I. COMPREHENSIVE ZOOLOGY

BY

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This section includes works that deal with more than one branch of Zoology, or that are of general interest to Zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special records complete each subject. A few memoirs included in the special records are repeated in this division.

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# II. PROTOZOA

ARRANGED BY

II. M. WOODCOCK, D.Sc.

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[Vacant.]

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# III. PORIFERA OR SPONGIDA

ARRANGED BY

H. M. WOODCOCK, D.Sc. (LOND.).

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ARRANGED BY

A. KNYVETT TOTTON.

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# V. ECHINODERMA

ARRANGED BY

H. B. PRESTON.

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- †*Echinoneidæ*, LAMBERT 90.
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- Echinus miliaris*, MACBRIDE 93.—*E.*, FUCHS 59.
- †*Encope*, KEW 85.
- †*Enallopneustes*, LAMBERT 91.
- †*Epiaster depressus* sp. n. Upper Cretaceous N. America, KEW Univ. Cal. Pub. Bull. Dept. Geol. 12 pp. 143–144 pl. xl figs. 3a, b, c, d.
- †*Eupatagus* with *E. figarii* sp. n. Eocene Egypt, STEFANINI Boll. Soc. geol. Ital. 38 p. 43 pl. iii figs. 2a, b.
- †*Euspatangus*, GREGORY & CURRIE 66.
- †*Faujasinæ*, LAMBERT 90.
- †*Fibularia*, CASTEX & LAMBERT 22.
- †*Galeropigydeæ*, LAMBERT 90.
- †*Globatorinæ*, LAMBERT 90.
- †*Goniopygus* with *G. menardi* Lor. var. n. *subconica* Upper Cretaceous Egypt, STEFANINI Boll. Soc. geol. Ital. 37 pp. 133–136 pl. v figs. 5a, b.
- †*Hebertia*, CASTEX & LAMBERT 22.
- †*Hemiasaster* with *H. alamedensis*, *cholamensis* Upper Cretaceous; *H. oregonensis* Cretaceous spp. n. N. America, KEW Univ. Cal. Pub. Bull. Dept. Geol. 12 pp. 144–148 pl. xl figs. 5a, b, c, d; xli figs. 1a, b, c, d, 2a, b, c, d.—*H.* with *H. mianii*, *H. orbignyana* var. *minor* sp. & var. n. Upper Cretaceous Egypt, STEFANINI Boll. Soc. geol. Ital. 37 p. 147 pl. v figs. 11a, b, 12a–c, 13a–d.—*H.*, GREGORY & CURRIE 66.
- †*Hemicidaris*, MUSPER 103.
- †*Hemipatagus hoffmanni*, ROIG 111.—*H.*, CASTEX & LAMBERT 22.
- †*Heteraster*, LAMBERT 91.
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- †*Neolampadidæ*, LAMBERT 90.
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 †*Pedinopsis* with *P. sinæa* var. [? n.] *figarii* Egypt, STEFANINI Boll. Soc. geol. Ital. 37 pp. 125–130 pl. v figs. 4a–f.  
 †*Pericosmus*, CASTEX & LAMBERT 22.—*P.*, FOURTAU 58.—*P.*, STEFANINI 119.  
 †*Pholidocidaris anceps*, BATHER 10.  
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 †*Procardiuloida*, LAMBERT 90.  
 †*Protoechinus*, BATHER 10.  
 †*Psammechinus*, BERZ 13.—*P.*, CASTEX & LAMBERT 22.—*P.*, FOURTAU 58.  
 †*Pseudarbacina*, FOURTAU 58.  
 †*Pseudodiadema*, MUSPER 103.  
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 †*Rachiosoma broccii* sp. n. Upper Cretaceous Egypt, STEFANINI Boll. Soc. geol. Ital. 37 pl. v figs. 15a–d, 16a–f.  
 †*Radiocyphus*, CASTEX & LAMBERT 22.  
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 †*Schizaster* with *S. isidis* nom. mut. for *S. libycus* Fourtau, STEFANINI Boll. Soc. geol. Ital. 38 p. 51.—*S.* with *S. cordiformis*, *diabloensis*, *martinezensis* spp. n. Eocene N. America, Kew Univ. Cal. Pub. Bul. Dept. Geol. 12 pp. 148–155 pls. xli figs. 5a, b, c; pl. xlii, figs. 1a, b, c, d, 2a, b, c, d.—*S.*, AIRAGHI 3.—*S.*, CASTEX & LAMBERT 22.—*S.*, CLARK 31.—*S.*, GREGORY & CURRIE 66.—*S.*, FOURTAU 58.  
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 †*Studeria*, FOURTAU 58.  
 †*Thylechinus*, CASTEX & LAMBERT 22.  
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*Anthenea*, SMITH 115.

- Asterias*, STEPHENSEN 120.
- Asteroidea*, ARNDT 5.—A., CLARK 33.
- Astrogonium*, STEPHENSEN 120.
- Bipinnaria antarctica* sp. n. Antarctic, MACBRIDE Rep. Brit. Ant. Exp. 1910 Zool. 4 p. 90.
- Bothriaster* gen. n., DÖDERLEIN zool. Jahrb. Jena 40 p. 415.
- Brisinga coronata*, THUST 128.
- Brisingella monocantha* sp. n. Eastern Pacific, CLARK Mem. Mus. Comp. Zool. Harvard 39 p. 107 pl. v. figs. 3-4.
- Bythiolophus*, CLARK 32.
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- Dytaster*, CLARK 32.
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- Heliaster solaris* nom. n. for *H. multi-radiatus* (Gray), CLARK Proc. biol. Soc. Washington 33 p. 183.—H., CLARK 32.
- Henricia*, CLARK 32.—H., STEPHENSEN 120.
- †*Hudsonaster clarki* sp. n. Ordovician Maryland, BASSLER Geol. Surv. Baltimore 1919 p. 211 pl. liii fig. 8.
- Hymenaster cremnodes*, *trias* spp. n. Eastern Pacific, CLARK Mem. Mus. Comp. Zool. Harvard 39 pp. 91 93 pls. iv fig. 1; iii figs. 1 2.
- Linckia*, CLARK 32.
- Litonotaster tumidus* sp. n. Eastern Pacific, CLARK Mem. Mus. Comp. Zool. Harvard 39 p. 83 pl. iii figs. 3-6.
- Luidia superba* sp. n. off Coast of Columbia, CLARK Proc. Biol. Soc. Washington 30 p. 171.—L. with *L. mascarena*, Indian Ocean; *L. sibogae*, off Borneo; *australiae*, Indian Ocean; *quinaria chinensis*, amurensis, inarmata, Pacific Ocean; *longispina malayana* Malaysia; *sagamina*, Pacific Ocean (N-13246 m) q
- spp. & subspp. n., DÖDERLEIN Siboga Exp. Livr. 88 Mon. 46b pp. 193-293 pls. xviii-xx.
- Mammaster*, CLARK 32.
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- †*Pentaceros*, MUSPER 103.
- Pharia*, CLARK 32.
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- †*Poraster* gen. n., DÖDERLEIN Zool. Jahrb. Jena 40 p. 438.
- Prognaster*, CLARK 32.
- †*Protoreaster* gen. n., DÖDERLEIN Zool. Jahrb. Jena 40 p. 420.
- Pseudarchaster*, CLARK 32.
- Pteraster*, STEPHENSEN 120.
- Siraster tuberculatus*, SMITH 115.
- Solaster*, STEPHENSEN 120.
- †*Sphaeraster*, MUSPER 103.
- Stichaster*, STEPHENSEN 120.
- Stylasterias paschae* sp. n. Eastern Pacific, CLARK Mem. Mus. Comp. Zool. Harvard 39 p. 105 pl. iv fig. 3.
- Styracaster*, CLARK 32.
- Zoroaster* with *Z. perarmatus* sp. n. Eastern Pacific, CLARK Mem. Mus. Comp. Zool. Harvard 39 pp. 100-104 pl. iv fig. 2.

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- Amphiura*, STEPHENSEN 120.
- †*Amphiura*, CLARK 31.
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*Ophioteles*, STEPHENSEN 120.

*Ophiopholis*, STEPHENSEN 120.

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*Ophiosteira k hleri* sp. n. off Coast of Ecuador, CLARK Proc. Biol. Soc. Washington 30 p. 173.

*Ophiura*, STEPHENSEN 120.

*Ophiuroidea*, ARNDT 5.—O., CLARK 33.—O., MORTENSEN 102.

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†*Abrachiocrinus*, WANNER 133.

†*Actinocrinus*, BENSON, DUN & BROWNE 12.

†*Allagecrinus*, WRIGHT 138.

†*Amphicrinus scoticus* Lower Carbon Scotland, *carbonarius* Carbon. U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 338, 341 pl. iv figs. 9-11, 12a, b.—A., WRIGHT 138.

†*Anisocrinus irregularis* sp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 p. 165 pl. x figs. 5-6.

†*Antedon*, FOURTAU 58.—A., MUSPER 103.

†*Apiocrinus*, GEMMELLARO 61.

†*Arthracantha*, THOMAS 124.

†*Asaphocrinus* gen. n. *Lecanocrinidae* with *A. bassleri* sp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 p. 174 pls. iv, x figs. 10-14.

†*Balanocrinus*, MUSPER 103.—B., WELSCH 134.

†*Cactocrinus* ? *brownei* sp. n. Lower Carbon, New S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 342.

†*Caleidocrinus*, SPRINGER 117.

†*Calpiocrinus intermedius, rotundatus, peculiaris* spp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 pp. 156, 159 pls. vii figs. 1-3, 6a-c, viii figs. 6-8.

†*Carabocrinus*, BASSLER 9.

†*Caryocrinites*, FOERSTE 56.

†*Cholocrinus*, SPRINGER 117.

†*Cleiocrinus*, SPRINGER 117.

†*Cleistocrinus* gen. n. *Ichthyocrinidae*, SPRINGER Crinoidea Flexibilia Washington 1920 p. 293 pl. xxxviii figs. 1-2.

†*Clidochirus americanus* Silurian U.S.A., *C. keyserensis* Helderbergian U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 p. 298 pl. xxxvii figs. 7-11.

†*Coenocystis*, WANNER 133.

†*Crinocystites*, FOERSTE 52.

*Crinoidea*, ARNDT 5.—C., CLARK 33.

†*Crinoidea*, BUTTS 19.—C., CAYEUX 23.—C., CLEMES 34.—C., FOERSTE 54.

†*Cromyocrinus*, WRIGHT 138.

†*Cydonocrinus*, SPRINGER 117.

†*Dactylocrinus alpena* sp. n. Devon., SPRINGER Crinoidea Flexibilia Washington 1920 p. 312 pl. xli figs. 10a, b.

†*Edriocrinus adnascens* sp. n. Devon. U.S.A., DUNBAR New Haven Conn. Trans. Acad. Arts. Sci. 23 p. 120.—*E. occidentalis, explicatus, adhaerens* Helderbergian U.S.A., *E. holopoides* Oriskany Sandstone U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 449, 451, 452 pl. lxxvi figs. 6-18, 22a-b, 23.

†*Embryocrinus* gen. n. *E. problematicus* sp. n. Ordovician New York State, HUDSON Albany N.Y. St. Mus. Bull. 196 p. 162.—E., WANNER 133.

*Eucalyptocrinus*, FOERSTE 52.

†*Eupachycrinus*, WRIGHT 138.

†*Euryocrinus barrisi* Devon, U.S.A., *E. tennesseensis* Lower Carbon. U.S.A., spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 316, 318 pl. xl figs. 1-3, 6a-c.

†*Eutaxocrinus eifelensis, perplexus* Devon. Europe, *whiteavesi, pulcher, amplius* Devon U.S.A., *montanensis* Lower Carbon. U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 364-366, 369, 370, 372 pls. xlvii figs. 18a, b, xlix figs. 1-7, 13, 1 fig. 20, lxxv fig. 10.

†*Forbesiocrinus burlingtonensis* sp. n. Upper Burlington Iowa, SPRINGER Crinoidea Flexibilia Washington 1920 p. 253 pl. xxvi figs. 3-5.

†*Gnorimocrinus cirrifer, varians* spp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 p. 355 pl. xlvii figs. 7-17.

- Hathrometra*, STEPHENSEN 120.
- Heliometra*, STEPHENSEN 120.
- †*Heterocrinus*, BASSLER 9.
- †*Homalocrinus tiljevalli* sp. n. Silurian SPRINGER Crinoidea Flexibilia Washington 1920 p. 155 pl. vi figs. 13–15.—H., SPRINGER 117.
- †*Hormocrinus* gen. n. *Lecanocrinidae* with *H. anglicus*, *gotlandicus* spp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 pp. 166, 168–169 pl. xiv figs. 6–7, 8a–d.
- †*Hydriocrinus*, WRIGHT 138.
- †*Hypocrinus*, WANNER 133.
- †*Ichthyocrinus phillipsianus* Silurian, England, *devonicus* Devonian U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 284, 290 pls. xxxv figs. 17a–c, xxxvi figs. 13–14.
- †*Isocrinus*, JAWORSKI 81.—I., WELSCH 134.
- †*Lageniocrinus*, WANNER 133.
- †*Lecanocrinus lindströmi*, *angulatus*, *meniscus* spp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 pp. 134–140 pls i figs. 37a–c; ii figs. 22, 23, 25–28.
- †*Lithocrinus*, SPRINGER 117.
- †*Meristocrinus* with *M. minor*, *tuberosus*, *anceps* spp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 pp. 313–314 pl. xvii figs. 4–6, 8, 9.
- †*Merocrinus*, BASSLER 9.
- †*Mespilocrinus romingeri*, *bordeni*, *thiemei*, *chapmani* spp. n. Lower Carbon. U.S.A., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 196–200 pl.v figs. 20a, b, 21a–d, 22, 23a–c, 24a, b.—M., WRIGHT 138.
- †*Metasycocrinus*, WANNER 133.
- †*Metichthyocrinus*, SPRINGER 117.
- †*Millerocrinus*, MUSPER 103.
- †*Monobrachiocrinus*, WANNER 133.
- †*Nipterocrinus*, SPRINGER 117.
- Oligometrides bellona* sp. n. Philippines, CLARK Proc. biol. Soc. Washington 33 p. 21,
- †*Onychocrinus wrighti* sp. n. Lower Carbon. Scotland, SPRINGER Crinoidea Flexibilia Washington 1920 p. 438 pl. lxxv fig. 14.—O., WRIGHT 138.
- †*Parichthyocrinus*, SPRINGER 117.
- †*Parisocrinus*, REED 109.
- †*Pentacrinites*, WELSCH 134.
- †*Pentacrinus*, MUSPER 103.—P., WELSCH 134.
- †*Periechocrinus*, FOERSTE 52.
- †*Platycrinus*, WRIGHT 138.
- †*Pleurocystites squamosus*, HUME 79.
- †*Poteriocrinus*, WRIGHT 138.
- †*Protaxocrinus girardeau*, *robustus* Silurian U.S.A., *P. virginensis* Devon. U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 349, 350 pl. xlv figs. 8–12.
- †*Pseudosaccoma strambergensis*, GEMMELLARO 61.
- †*Pycnosaccus patei* Silurian U.S.A., *tenuibrachiatatus* Devonian U.S.A., *welleri*, *dubius* Silurian U.S.A. spp. n., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 186, 187–189 pls. xii figs. 1–9, xiii figs. 1–2, 3–5, 11a, b.
- †*Reteocrinus*, BASSLER 9.
- †*Rhodocrinus*, WRIGHT 138.
- †*Rhopalocrinus*, SPRINGER 117.
- †*Sagenocrinus clarki* sp. n. Silurian, SPRINGER Crinoidea Flexibilia Washington 1920 p. 220 pl.xix figs 4a–d.
- †*Sycocrinus*, SPRINGER 117.
- †*Synaptocrinus* gen. n. *Ichthyocrinidae*, SPRINGER Crinoidea Flexibilia Washington 1920 p. 301 pl. xxxviii figs. 3–6.
- †*Synerocrinus*, SPRINGER 117.—S., WRIGHT 138.
- †*Sycocrinus*, WANNER 133.
- †*Talarocrinus*, ULRICH 129.
- †*Taxocrinus telleri* Devon. U.S.A., *T. pustulosus*, *ornatus* Lower Carbon. U.S.A., *T. belgicus* Lower Carbon. Belgium, *T. praestans*, *huntsvillae* Lower Carbon. U.S.A., SPRINGER Crinoidea Flexibilia Washington 1920 pp. 386, 391, 393, 395, 404, 407, pls. lii figs. 7–8; liv figs. 2a, b, 12, 13, 19, 20; lviii figs. 1–8.

†*Temnocrinus*, SPRINGER 117.

†*Thiollierocrinus*, MUSPER 103.

†*Timorocidaris*, BATHER 11.

†*Tribrachiocrinus*, WRIGHT 138.

†*Ulocrinus*, WRIGHT 138.

†*Wachsmuthicrinus bernhardinae*,  
*iowensis* Lower Carbon. U.S.A., *ponderosus* Lower Carbon. Scotland spp. n.,  
SPRINGER Crinoidea Flexibilia Wash-  
ington 1920 pp. 332-333 pl. xlv figs.  
6-8, 9a-c.

†*Woodocrinus*, WRIGHT 138.

†*Zeacrinus*, WRIGHT 138.

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†*Agelacrinus*, FOERSTE 52.

†*Allocystites*, FOERSTE 52.

†*Calocystites*, FOERSTE 52.

†*Camarocystites*, FOERSTE 52.

†*Caryocystites*, BASSLER 9.

†*Coelocystis*, FOERSTE 52.

†*Cyclocystoides*, FOERSTE 52.

†*Cystidea*, FOERSTE 54.

†*Echinospaerites aurantium ameri-*  
*canum* var. n. Ordovician Maryland,  
BASSLER Maryland Geol. Surv. Balti-  
more 1919 p. 207 pl. lv figs. 15-20.—*E.*,  
FOERSTE 52.

†*Edrioasteroidea*, FOERSTE 54.

†*Gomphocystites* with *G. bownockeri*  
sp. n. Silurian Ohio, FOERSTE Ohio J. Sci.  
21 pp. 55-57 pl. i figs. 5a, b; ii figs. 9a, b;  
iii figs. 1a, b, 2a, b, 6a, b, 9a, b.

†*Hallicystis*, FOERSTE 52.

†*Holocystites*, FOERSTE 52 & 55.

†*Lycocystites*, FOERSTE 52.

†*Megacystis*, FOERSTE 52.

†*Narrowayella* gen. n. Type *Cyclo-*  
*cystoides cincinnatiensis* Mill. & Fab.,  
FOERSTE Ohio. J. Sci. 21 p. 59.

†*Savagella* gen. n. Type *Cyclocystoides*  
*ornatus* Sav., FOERSTE Ohio. J. Sci. 21  
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†*Trematocystis*, FOERSTE 52.

†*Troostocrinus* with *T. sanctipaulensis*  
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Silurian Ohio, FOERSTE Ohio J. Sci. 21  
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†*Wellerocystis* gen. n. with *W. kimmo-*  
*wickensis* sp. n. Silurian Ohio, FOERSTE  
Ohio J. Sci. 21 pp. 36-37 pl. i figs. 12a, b.

#### H.—BLASTOIDEA.

†*Codaster lorae* sp. n. Devon. U.S.A.,  
DUNBAR New Haven Conn. Trans.  
Acad. Arts Sci. 23 p. 119.

†*Mesoblastus*, ULRICH 129.



# VI. VERMIDEA

ARRANGED BY

H. M. WOODCOCK.

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*Thelandros micruris* sp. n. from *Uromastix* diagnosed, p. 458 fig. 14; RAUTHER Zool. Jahrb. Abth. Anat. 40.

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#### (c) Acanthocephala.

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## (b) Polychaeta.

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*Priapulius caudatus*, cyto-physiological observations on glands; HAMMARSTEN & RUNNSTRÖM Bergens Mus. Aarb. 1917-1918 No. 13 pp. 1-15 2 pls.

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[Vacant.]

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[Vacant.]

# VII. BRACHIOPODA AND BRYOZOA

BY

W. N. EDWARDS.

## (a) BRACHIOPODA

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†*Leptaena convexa* sp. n. Illinois Carboniferous, WELLER Ill. Geol. Surv. 1914 p. 52.

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†*Rhipidomella jerseyensis* p. 157, *tenuicostata* p. 158, spp. n. Illinois Carboniferous, WELLER Ill. Geol. Surv. 1914.

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†*Rhynchotrete insinuata* sp. n. Tennessee Devonian, DUNBAR Trans. Connecticut Acad. 23 p. 132.

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†*Spirifer plicatosulcatus* sp. n. British Isles Carboniferous, NORTH Quart. Journ. Geol. Soc. 67 p. 193.

†*Spirifer sophiae*, *hassaki*, spp. n. Graz Devonian, HERITSCH Denk. K. Ak. Wiss. Wien 92 1916 p. 580.

†*Spirifer lupusensis* sp. n. [Nomen nudum], GREGER 16 p. 23.

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†*Spiriferella lator* sp. n. Illinois Carboniferous, WELLER III. Geol. Surv. 1914 p. 414.

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†*Spiriferina perplicata* sp. n. British Isles Carboniferous, NORTH Quart. Journ. Geol. Soc. 76 p. 219.

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*Membranipora serrulata*, OSBURN 13.

†*Membraniporella crassicolis*, *planula* p. 286, *ultricki*, *bioculata* p. 287, *compressa* p. 288, *monilifera*, *subagassizi* p. 289 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Membraniporidra oecioporosa* p. 133, *pachymuralis*, *trigemma* p. 134, *laticella* p. 135, *spissimuralis* p. 136, *similis* p. 137, *pyriformis* p. 138, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Membraniporina canalifera* p. 95, *sinesolum* p. 96, *claviformis* p. 97, *tubulosa* p. 98, *arcana* p. 99, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Membrandoeonium transversum*, *duplex* p. 120, *lowei* p. 121, *rectum* p. 122 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Meniscopora elliptica* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 557.

†*Mesonea* gen. n., type *Retepora radians*, CANU & BASSLER 4 p. 762.

†*Metracolpoda brevis*, *grandis* p. 305, *cylindrica* p. 307, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Metradolium labratulum* p. 441, *parvirimulatum* p. 443, *transversum* p. 444, *grande*, *conveniens* p. 445, *obliquum* p. 446, *sulciferum* p. 447, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Metrarabdotos grande* sp. n. Tertiary, CANU & BASSLER 4 p. 537.

†*Metroporiella albora* p. 361, *grandipora*, *porosa* p. 362, *acervata*, *latipora* p. 365, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Microecia flabellata* p. 735, *vibrio*, *hirta* p. 736 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Micropora minuticella* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 237.

†*Mucronella patens*, *granulosa* spp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 475.

†*Myriozoum* sp., DALL 7 p. 34.

†*Nellia bifaciata*, *concentenata*, *midwayanica*, spp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 197.

†*Ochetosella robusta* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 453.

†*Ogivalina elongata* sp. n. p. 118 and var. n. *minor* p. 119, U.S.A. Tertiary, CANU & BASSLER 4.

†*Oncosoezia quinqueseriata* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 692.

†*Onychocella georgiana* p. 206, *celsa*, *laciniosa* p. 207, *dupliciter* p. 208, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Orosopora* gen. n., type *Lichenopora ciliata*, CANU & BASSLER 4 p. 822.

†*Otionella McCalliei* p. 106, *tuberosa* p. 107, *cava* p. 108, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Pachytheca stipata*, sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 322.

†*Parleiosocia* gen. n. type *jacksonica* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 824.

†*Partretocyclocia reptans, porosa* p. 831, *exilis* p. 834 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Perigastrella ansata* p. 576, *hexagonalis, rhomboidalis* p. 577, *oscitans* p. 578, *elegans* p. 579, *maxilla* p. 580, *trapezoidea* p. 581, *depressa, rectilineata* p. 582, *plana* p. 583, *costifera* p. 584, *tubulosa* p. 585, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Peristomella laticella, erecta* p. 413, *falcifera* p. 415 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

*Peristomoecia* gen. n. type *Stomatopora divergens*, incl. *Proboscina lamourouzi* and *bourgi*, CANU & BASSLER 4 p. 692.

†*Phoeceana* (?) *simulator* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 496.

†*Phylactella parvicollum* p. 574, *parvicella, cribrata* p. 575, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Plagiocia lobata, clavioides, superposita* p. 710, *brundidgensis, tubifer, concreta* p. 711, *divagans* p. 712, *globulosa* p. 713, *lamellosa, botula* p. 714, *hirta* p. 715, *marginata* p. 716, *discoidea* p. 717 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Plagiosmittia porelloides* p. 472, *virgula* p. 473 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Platonea* gen. n., type *Reptotubigera philippisae*, p. 759; *clavata, lamellifera* p. 760 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Pleuronea* gen. n., type *Idmonea fenestrata*, p. 765; *fibrosa* p. 765, *subpertusa* p. 767, *fusiformis* p. 768, *alveolata* p. 769 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Polyascosocia* gen. n. p. 837, type *coronopus* sp. n. *jacksonica* p. 837, *umbricata* p. 840 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Porella obliqua* p. 481, *irregularis, granulosa* p. 484, *coronata, denticulifera*, p. 485, *jacksonica* p. 486, *pungens* p. 487, *unguiculata, planulata* p. 488, *abditata, portentosa* p. 489, *crassoparies* p. 490, *cylindrica, erecta* p. 491, *compacta* p. 492, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Proboscina variabilis, admota* p. 659, *rugosa, projecta* p. 650, *geminata, anceps, exspatiata* p. 661, *alternata, divergens* p. 662, *colubra, clavatulata, striatulata* p. 663, *prominens, undulata, parviangulata* p. 664, *subechinata, exigua* p. 665, *rectalineae, conveniens* p. 666, *clavaturamosa, latobrevis* p. 667, *cranei, idmoneoides, magniramosa* p. 668, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Puellina bispinosa* p. 297, *simulator* p. 298, *inarmata* p. 299, spp. n., *radiata* var. n. *anaticula* p. 297, U.S.A. Tertiary, CANU & BASSLER 4.

†*Pyripora parvicella* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 80.

†*Quadricellaria* (?) *laciniata, burnsi*, spp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 279.

†*Ramphonotus levis, sloani* p. 164, *baccatus, regularis*, p. 165, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Rectonychocella bilamellaria, semiluna* p. 210, *tenuis* p. 211, *elliptica* p. 212 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

*Retepora pacifica* var. n. *japonica* p. 615, *misakiensis* sp. n. p. 616, *watanabei* sp. n. p. 618, *R. (Retoporella) kinoshitai* p. 624, *crenulata* p. 626, spp. n. Japan, OKADA Annot. Zool. Japon. 9 figs.

†*Retepora ramosa* p. 501, *scutulata, laciniata* p. 504 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Rhagasostoma levigatum* p. 254, *minusculum* p. 255, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Rhamphostomella simplex* p. 477, *convexa* p. 478, spp. n., *brendolensis* var. n. *americana* p. 477 U.S.A. Tertiary, CANU & BASSLER 4.

†*Romancheina hexagona*, p. 407, *parvipunctata* p. 408 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Rosselliana parvipora* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 228.

†*Schismopora globosa* p. 598, *umbonata, orbicularis* p. 600 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Schizobathysella semilunata* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 590.

†*Schizobrachiella* gen. nov., type *Hemeschara sanguinea*, incl. *Lepralia candida*, *L. goniosotoma*, *L. granosopora*,

*Schizoporella levinsoni*, *S. alata* and *S. subsinuata* U.S.A. Tertiary, CANU & BASSLER 4 p. 353.

†*Schizolavella* gen. nov., type *Schizoporella vulgaris*, incl. *Eschara phymatopora* and *Lepralia schizostoma* U.S.A. Tertiary, CANU & BASSLER 4 p. 358.

†*Schizomavella granulifera* p. 355, *granulosa* p. 356, *elongata*, *arborea* p. 357, *longirostris* p. 358, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Schizopodrella* (?) *marginata* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 342.

†*Schizorthosecas grandiporosum* p. 627, *radiatum* p. 628 spp. n. U.S.A. Tertiary CANU & BASSLER 4.

†*Scrupocellaria cookei*, *milneri* p. 186, *resseri* p. 187, *willardi*, *triangulata* p. 188, *rathbuni*, *vaughani* p. 189, *dubia*, *clausa* p. 190, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Semihawellia tripora*, *exilis* p. 518, *clara* p. 519, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Smittina collum* p. 457, *labiata*, *grandifossa*, p. 460, *coronata* p. 461, *exigua* p. 463, *puncturata* p. 464, *sordida*, *cophia* p. 465, *ampla* p. 466, *reticuloides* p. 467, *telum*, *granulosa* p. 468, *orbicularia* p. 469, *pupa* p. 470 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Smittipora midwayanica* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 225.

†*Spiropora majuscula* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 675.

†*Stamenocella cylindrica* p. 168, *midwayanica*, *anatina* p. 169, *pyriforma* p. 170, *inferaviculifera* p. 172, *grandis*, *intermedia* p. 173, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Steganoporella jacksonica* p. 262, *rectangularia*, *incrustans* p. 263, *vicksburgica* p. 264, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Stephanosella parvipora* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 344.

†*Stomatopora*, *opposita* p. 654, *contracta*, *exigua*, *parvipora* p. 655, *polygona*, *minuta*, *excavans*, p. 656, *cornu*, *pratti*, *striatula* p. 657, *fasciolata* p. 658 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Tegella aculeata* p. 166, *nicklesi*, p. 167, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Telopora* gen. n. type *Supercystis watersi*, incl. *S. digitata*; *patens*, sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 807.

†*Tervia gracilis* p. 788, *parvula*, *tumida* p. 790, *globulifera* p. 791, *pyrifera* p. 792 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Terviidae* fam. n. incl. *Tervia*, *Prosthenoecia*, *Lagonoecia*, CANU & BASSLER 4 p. 788.

†*Tessarodoma ornata* p. 521, *grandipora* p. 522, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Tetraplaria tuberculata*, *caudifera* spp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 368.

†*Thalamoporella prima* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 269.

†*Tretocycloecia grandis*, *reticulata* spp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 827.

†*Tretonea* gen. n., type *levis* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 769.

†*Trochiliopora* sp., Chalk, Sussex; GASTER 8.

†*Trypematella* gen. n. *papulifera* sp. n. Pleistocene California, CANU & BASSLER 4 p. 417

†*Trypostega elongata* p. 328, *undulata* p. 329 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Tubucella gibbosa* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 548.

†*Tubucellaria parviporosa*, *fallax* p. 543, *vicksburgica* p. 544, *nodifera* p. 546, spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Tubulipora midwayanica* p. 753, *interrupta* p. 758 spp. n. U.S.A. Tertiary, CANU & BASSLER 4.

†*Umbonula* (?) *miser*, sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 494.

†*Velumella levigata*, *plicata* spp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 214.

*Victorella pavida* fig., VANHOFFEN 17.

†*Watersipora* (?) *erecta* sp. n. U.S.A. Tertiary, CANU & BASSLER 4 p. 538.

# VIII. MOLLUSCA

ARRANGED BY

H. B. PRESTON.

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†*Olivella muticoides* var. *portoricensis* and *O. portoricensis* var. & sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 156-157.—*O. quadruplicata* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 185.—*O.*, MAURY 349.

†*Turricula (Vulpecula) wanneri* sp. n. Tertiary, TESCH Pal. Timor 5 p. 48.

†*Volutidae*, YOKOYAMA 566.

FASCIOLARIIDÆ, TURBINELLIDÆ, BUC-  
CINIDÆ, NASSARIIDÆ, (*Nassidæ*  
*olim*), PYRENIDÆ (*Columbellidæ*  
*olim*), MURICIDÆ & THAIDIDÆ  
(*Coralliophilidæ olim*).

†*Agasoma gravidum multinodosum* var. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 183.

†*Alectrion gurabensis* var. *portoricensis* and var. *varicum* varr. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 151.—*A.*, MAURY 349.

†*Amphissa pulchilineata* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 174.

*Anachis bartschii* sp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 233.

*Ancistrolepis latus* sp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 229.

*Boreotrophon xestra*, *echinus* spp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 232.

†*Buccinidae*, YOKOYAMA 566.

†*Buccinofusus*, ROMAN & MAZERAN 433.

*Buccinum* with *B. tanquaryi*, *ekblawi* spp. n. Arctic Seas, BAKER N.Y. Bul. Amer. Mus. Nat. Hist. 41 pp. 507-513.—*B. hydrophanum*, NORDGAARD 371.—*B.*, DALL 150.

*Bullia tenuistriata* sp. n. S. Africa, TOMLIN J. Conch. Leeds 16 p. 87.

†*Clavella californica* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 183.

*Cominella*, MAY 352.

*Columbella apicibulbus* sp. n. S. Africa, TOMLIN J. Conch. Leeds 16 p. 87.—*C. (Mitrella) tenuilineata* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 173.—*C. molengraaffi* sp. n. Tertiary, TESCH Pal. Timor 5 p. 62.

†*Columbellidae*, YOKOYAMA 566.

*Colus (Latisipho) lepidus*, *C. (Limatofusus) tahwitanus* spp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 228.

*Cominella quoyi*, HEDLEY 237.

*Chrysodomus*, DALL 150.

†*Chrysodomus mesleri*, *leffingwelli* spp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125-c p. 28.—*C. ? pulcherrimus* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 175.

†*Cryptorhytis*, ROMAN & MAZERAN 433.

*Fasciolaria papillosa*, JOHNSON 289.

†*Fusinus* with *F. (Exilia) pino-lianus* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 177-179.

*Fusus*, SCHITZ 449.

†*Fusus*, HUBBARD 265.

†*Hindsia wanneri* sp. n. Tertiary, TESCH Pal. Timor 5 p. 69.

†*Latirus fusiformis* sp. n. Tertiary, TESCH Pal. Timor 5 p. 55.

*Murex* with *M. torrefactus insularum* subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 318-319.—*M. cyclostoma baldwiniana* subsp. n. Hawaii, PILSBRY t.c. p. 373.—*M. fulvescens*, Sow. and *M. spinicostata*, Kiener, FULTON 193.—*M.*, HIRSCH 256.—*M.*, SCHITZ 449.

†*Murex (Ocinebra) sobrantensis* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 176.—*M. (Chicoreus) timorensis* sp. n. Tertiary, TESCH Pal. Timor 5 p. 64.—*M.*, HUBBARD 265.—*M.*, MAURY 349.

†*Muricidae*, YOKOYAMA 566.

*Nassa*, CHRISTENSEN 117.—*N.*, SCHITZ 449.

†*Nassa (Hinia) assimilis*, sp. n. *N. (Uzita) reticosa* var. n. *woodii* Pliocene, HARMER Plioc. Moll. 2 pp. 516-519.

†*Nassidae*, YOKOYAMA 566.

*Neptunea antiqua* subsp. *japonica*, Dtz. & Fisch. = *Chrysodomus intersculptus*, Sow., FULTON London Proc. Malac. Soc. 14 p. 3.

*Ocinebra erinaceus* var. n. *major* France, DAUTZENBERG J. conchyliol. 65 p. 46.

†*Ocenebra Kendallii* sp. n. Pliocene, HARMER Plioc. Moll. 2 p. 522.

†*Perse* gen. n. *Fusidae*, *P. corrugatum* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 179-180.

†*Phos* with *P. elegans* var. *portoricensis* var. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 149.—*P.*, MAURY 349.

*Plicifusus johanseii* sp. n. Arctic, DALL Rept. Can. Arct. Exp. 8 p. 21A.—*P. (Retifusus) scissuratus*, *P. (Aulacofusus) rhyssoides*, *P. (Latifusus) wakanus* spp. n. Pacific, DALL Proc. S.S. Nation. Mus. 54 pp. 226-227.

†*Pseudoperissolax* gen. n. *Fusidae*, *P. merriami* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 180-182.

*Purpura (Polytrope) lapillus* varr. n. *citrina*, *cærulescens*, *monozonalis*, *mixta* France, DAUTZENBERG J. conchyliol. 65 p. 47.

†*Purpuroidea*, DIETRICH 165.

†*Pyrrula hoveyi* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 60.

†*Pyrrulofusus schaderi* sp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125-c p. 29.

*Searlesia constricta* sp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 228.

†*Searlesia dalli* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 175.

*Siphonalia lubrica* sp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 230.

†*Siphonalia senilis* sp. n. Tertiary N. Zealand, MARSHALL & MURDOCH Trans. and Proc. N.Z. Inst. 52 p. 131.

*Sistrum vitiense* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 319.

†*Strombina portoricana* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 149.

†*Thais packi* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 177.—*T. (Nucella) nomeana* sp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125 c p. 29.

†*Thersitea*, SAVORNIN 445.

*Tritonalia fraseri* sp. n. W. Coast N. America, OLDBROYD Nautilus 33 p. 135.

†*Turbinella chipolana* varr. *precursor*, *areciboense* varr. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 153-154.

*Verconella*, [ANON.] 16.

*Vexillum thaanumi*, *zenium*, *micra*, *turben kanaka* spp. & subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 316-318.—*V. thaanumi* sp. n. Hawaii, PILSBRY t.c. p. 372.

*Volutopsinus stefanassoni* sp. n. Arctic, DALL Rept. Can. Arct. Exp. 8 p. 22A.

†*Xancus*, HUBBARD 265.

CYMATIDÆ (*Lotoriidae olim*), CASSIDIDÆ, TONNIDÆ (*Doliidae olim*), CYPREIDÆ, STROMBIDÆ, APORRHAIIDÆ & STRUTHIOLARIIDÆ.

†*Alaria*, DIETRICH 165.

*Aporrhais*, SCHITZ 449.

†*Arrhoges*, ROMAN & MAZERAN 433.

†*Cassis*, HUBBARD 265.

†*Chenopus*, DIETRICH 165.—*C.*, ROMAN & MAZERAN 433.

*Colubraria juanica* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 61.

*Cypraea bernardinae*, Preston, MELVILL 354.

†*Cypraea depéreti* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 62.—*C. sancti-sebastiani* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 58.—*C.*, HUBBARD 265.

†*Dicroloma*, ROMAN & MAZERAN 433.

†*Doliidae*, YOKOYAMA 566.

†*Malea*, HUBBARD 256.—*M.*, MAURY 349.

*Morio* with *M. cylindrica* ? sp. n. Mediterranean, COEN Atti Soc. Ital. Nat. 59 pp. 129-135.

†*Orithaulax aguadillensis* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 58.—*O.* with *O. portoricensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 145-146.

*Ovula insculpta* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 37.

†*Pereiraia*, SAVORNIN 445.

†*Pholium fibratum* sp. n. Tertiary N. Zealand, MARSHALL & MURDOCH Trans. and Proc. N.Z. Inst. 52 p. 131.

†*Pterodonta*, ROMAN & MAZERAN 433.

*Strombus ostergaardi* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 320.—S., MACCLENDON 328a.

†*Strombus*, HUBBARD 265.—S., MAURY 349.

†*Struthiolaria zelandiae* sp. n. Tertiary N. Zealand, MARSHALL & MURDOCH Trans. and Proc. N.Z. Inst. 52 p. 130.

†*Tritonidae*, YOKOYAMA 566.

CERITHIIDÆ, PLANAXIDÆ, NERINEIDÆ, TRICHOTROFIDIDÆ, VERMETIDÆ, TURRITELLIDÆ, & CAECIDÆ.

*Batillaria*, CHARPIAT 115.

*Bittium*, SCHITZ 448.

†*Bittium dissimile* sp. n. Pliocene, HARMER Plioc. Moll. 2 p. 526.—B., HUBBARD 265.

*Cæcum oahuense* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 375.

†*Cerithiidae*, YOKOYAMA 566.

†*Cerithiopsidae*, YOKOYAMA 566.

*Cerithiopsis apicostata*, *mamilla* spp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 65.

*Cerithium*, SCHITZ 448.

†*Cerithium portoricensis*, *quebradilensis*, *C. (Campanile) collazum* spp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 141–143.—*C. russelli arecibense*, *C. utuadicum* var. & sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 50.—C., DIETRICH 165.

†*Itieria (Campicheia) zwierzykii* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 145.

†*[Loxotrema] Aramacensis* sp. n. Lower Cretaceous Queensland, ETHERIDGE Qland. Geol. Surv. 269 p. 9.

†*Mesalia palaeocretacea* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 133.—M., RUSSO 439.

†*Modulus*, HUBBARD 265.

†*Nerinea* with *N. hennigi*, *N. (Diozotypis) toucasiaephila*, *N. (? D.) carola* spp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 pp. 134–141.—N., ROMAN & MEZERAN 433.

†*Nerinella*, DIETRICH 165.

†*Omphalia*, DIETRICH 165.

†*Petalococonchus* with *P. ? collazoensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. pp. 139–140.

†*Portoricia* sec. n. *Campanile*, *C. (P.) laricum* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 54–55.

†*Potamides (Cerithidea) brauneri* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 171.

†*Procerithiopsis* gen. n. with *P. amiguis* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 pp. 50–51.

†*Promathildia pacifica* sp. n. Trias Timor, JAWORSKI Stuttgart Pal. Timor p. 130.

†*Ptygmatis*, DIETRICH 165.

†*Seila attenuissima* sp. n. Tertiary N. Zealand, MARSHALL & MURDOCH Trans. and Proc. N.Z. Inst. 52 p. 129.

†*Terebralia*, ROMAN & MAZERAN 433

†*Tiaracerithium*, CHARPIAT 114.

†*Trichotropidae*, YOKOYAMA 566.

†*Triphora aoteaensis* sp. n. Tertiary N. Zealand, MARSHALL & MURDOCH Trans. and Proc. N.Z. Inst. 52 p. 129.—T., MAY 352.

*Turritella*, MAY 352.—T., SCHITZ 448.

†*Turritella* with *T. porterensis*, *sobran-tensis* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 170–171.—*T. altilira culebrina*, *T. collaica*, *pocensis*, *guanicensis* var. & sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 51–52.—*T.* with *T. tornata* var. *portoricensis*, *T. mitchelli*, *portoricensis*, *berkeyi* var. & spp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 136–139.—*T.* with *T. russoi* sp. n. Eocene W. Morocco, RUSSO Paris C. R. Acad. Sci. 170 p. 123.—*T. (?) circumcircula*, *walshensis*, *microlina* spp. n. Lower Cretaceous Queensland, ETHERIDGE Qland. Geol. Surv. 269 pp. 12–13.—T., ROMAN & MAZERAN 433.—T., DIETRICH 165.

†*Turritellidae*, YOKOYAMA 566.

†*Uchauxia* with *U. richei* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 54-55.

*Vermetidae*, YOKOYAMA 566.

TIARIDÆ (*Melaniidæ olim*), PSEUDO-MELANIIDÆ, PLEUROCERIDÆ, LITTORINIDÆ & FOSSARIDÆ.

*Acrostoma*, ANNANDALE 8.

†*Compsopleura*, HENDERSON 242.

*Cremnoconchus syhadrensis*, ANNANDALE 7.—C., ANNANDALE & PRASHAD, 12.

*Fossarus ecphora* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 375.

†*Glaucônia*, ROMAN & MAZERAN 433.

*Goniobasis goodrichi* sp. n. Tennessee, HINKLEY Univ. Mich. occ. pprs. Mus. Zool. 78 p. 1.

*Littorina littorea*, CAULLERY & PELSENEER 94.—L., TATTERSALL 478.

†*Littorina* with *L. littorea* varr. n. *parva*, *distorta*, *conica*, *complanata*, *angulata*, *truncata* Pliocene, HARMER Plioc. Moll. 2 pp. 645-652.

†*Loxonema praeursor* sp. n., MANSUY Mem. Serv. géol. Indochine 3 p. 10.—*L. (?) parva* sp. n. Permian U.S.A., STAUFFER & SCHROYER Ohio. Geol. Surv. 22 p. 145.

*Melania*, ANNANDALE 8.—M., ANNANDALE & PRASHAD 12.

*Melanoides*, ANNANDALE 8.

*Melanopsis* with *M. ricardi* var. [? n.] *major*; *M. excoriata* varr. [? n.] *minor*, *semisulcata*, *festiva*; *M. marocana* varr. [? n.] *ampla*, *media*; *M. laevigata* var. [? n.] *minor*; *M. pseudoferussaci* var. [? n.] *minor*; *M. zebra*, *zebrina*, *cristata*, *minor*; *M. torquilla* var. [? n.] *minor*; *M. douvillei* varr. [? n.] *major*, *laevis*, *decorata*, *decorata minor*, *perornata*; *M. magnifica* varr. [? n.] *serira* Morocco, PALLARY J. conchyliol. 65 pp. 140-153.

†*Oonia gappi* sp. n. Jura, KITTL Wien Ann. Nat. Hist. Hofmus. 30 p. 54.

*Pachycheilus pottianus* sp. n. Guatemala, HINKLEY Nautilus 34 p. 54.—P., PILSBRY 407.

†*Palaeostylus* gen. n. with *P. pupoides*, *dussaulti*, *indosinicus*, *intermedius* spp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 pp. 48-50.

*Paludomus obesa*, ANNANDALE & PRASHAD 12.

*Plotia fusulus* sp. n. Aru Isds., BOETTER Abh. Senckenb. Ges. 35 p. 134.

†*Pseudomelania* with *P. (Oonia) recki*, *P. (Trajanella) fraasi* spp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 pp. 129-131.—P., ROMAN & MAZERAN 433.

†*Riselloidea*, COUFFON 136.

†*Scutularia* gen. n. with *S. textilis* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 48.

†*Soleniscus elegantulus* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 45.

*Sphaeromelania hinkleyi* sp. n. Guatemala, MARSHALL U.S. Nation. Mus. Proc. 58 p. 301.

*Taia*, ANNANDALE 8.

SOLARIIDÆ, JEFFREYSIIDÆ, LITHIOPIDÆ, RISSOIDÆ, HYDROBIIDÆ, VIVIPARIDÆ, VALVATIDÆ, AMPULLARIIDÆ & ASSIMINEIDÆ.

†*Alvania* with *A. belli* sp. n. Pliocene, HARMER Plioc. Moll. 2 pp. 606-621.

*Amnicola (Alocinma)*, ANNANDALE 7.

†*Amnicola winkleyi leightoni* var. n. Pleistocene U.S.A., BAKER Nautilus 33 p. 125

*Amphithalamus luteofuscus* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 63.

*Ampullaria lattroei* subsp. n. *chamana* Guatemala, HINKLEY Nautilus 34 p. 53.—*A. nux*, ANNANDALE & PRASHAD 12.—*A. gigas*, SACHWATKIN 443.—A., GERMAIN 203.

*Assemanina ostiorum* sp. n. France, BAYAT J. conchyliol. Paris 46 p. 161.

*Barleeia* with *B. dalli*, *bentleyi*, *sanjuanensis*, *oldroydi*, *californica*, *ortuti*, *coronadoensis*, *carpenteri*, spp. n. California, BARTSCH U.S. Nation. Mus. Proc. 58 pp. 166-175.

*Blanfordia nosophora*, CORT 135.

*Bithynia tentaculata*, BOYCOTT 72.—B., ANNANDALE 7.

*Bythinella dunkeri*, BREGENZER 75.

*Cochliopa* with *C. hinkleyi*, *minor*, *izabal* spp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 pp. 197–201.—*C. dulcensis* sp. n. Guatemala MARSHALL U.S. Nation. Mus. Proc. 58 p. 302.

*Diala*, MAY 352.

*Estea* with *E. microcosta*, *perpolita*, *labrotoma* spp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 pp. 60–61 69.

†*Euomphalus khmerianus* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 40.—*E.* with *E. carrollensis* sp. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 360.

*Haurakia supracostata* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 62.

*Heliacus panamensis* sp. n. Panama, BARTSCH Proc. U.S. Nation. Mus. 54 p. 573.

*Hydrobiidae*, ANNANDALE 7.

*Hydrobioides*, ANNANDALE 7.

*Lanistes*, GERMAIN 203.

*Lecythoconcha* gen. n. *Viviparidae*, ANNANDALE Rec. Ind. Mus. Calcutta 19 p. 114.

*Lippistes consobrina*, sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 64.

*Merelina sculptilis*, sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 62.

*Mysorella*, ANNANDALE 7.

*Mysorellinae* subfam. n. of *Hydrobiidae* for *Mysorella*, Godwin Austen, ANNANDALE Rec. Ind. Mus. Calcutta 19 pp. 41–46.

*Notosetia purpureostoma* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 63.

*Pachylabra* with *P. angelica*, *P. turbinis* race *lacustris* sp. & race n. Siam. ANNANDALE J. Nat. Hist. Soc. Siam 4 pp. 4–23 & 45.

†*Paludina*, HENDERSON 242.

*Paludinae*, BÜTIKOFER 85.

*Paludestrina jenkinsi*, HOLLIS 262.—*P. j.*, QUICK, 416.—*P. j.*, ROBSON, 427 & 428.—*P. stagnalis*, ROBSON 429.—*P. s.*, QUICK 415.—*P.*, NEWTON 369.

*Paranerila* subgen. n. of *Hydrobioides*, ANNANDALE Rec. Ind. Mus. Calcutta 19 pp. 41–46.

†*Rissoa* with *R. dissimilis* sp. n. Pliocene, HARMER Plioc. Moll. 2 pp. 625–636.

*Rissoella* with *R. excolpa* sp. n. California, BARTSCH U.S. Nation. Mus. Proc. 58 pp. 160–162.

†*Rissoidae*, YOKOYAMA 566.

*Rissoina striatula hawaiiensis* subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 321.

†*Rissoina obliquecostata* sp. n. Tertiary N. Zealand, MARSHALL & MURDOCH Trans. and Proc. N.Z. Inst. 52 p. 128.

*Rissoopsis brevis*, sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 63.

*Sataria* gen. n. for *Bithynia evezardi*, Blandford, ANNANDALE Rec. Ind. Mus. Calcutta 19 p. 41–46.

†*Skeneidae*, YOKOYAMA 566.

†*Solariidae*, YOKOYAMA 566.

†*Solarium* with *S. lindiensis* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 pp. 127–128.

*Syncera* with *S. panamensis* Panama; *S. magdalenensis* California spp. n., BARTSCH U.S. Nation. Mus. Proc. 58 pp. 163–166.

*Temnotaia*, ANNANDALE 8.

*Valvatidae*, BÜTIKOFER 85.

*Vivipara* [vide etiam *Viviparus*] *decipiens aruana* subsp. n. Aru Isl., BOETTGER Abh. Senckenb. Ges. 35 p. 135.—V., ANNANDALE 8.

*Viviparus* [vide etiam *Viripara*], KENNARD & WOODWARD 296.

†*Viviparus*, NEWTON 369.

CYCLOPHORIDÆ, CYCLOSTOMATIDÆ & TRUNCATELLIDÆ.

*Abbottella* gen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 75.

*Adamsiella*, Pfr. with *Adamsiellops* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 70–71.

*Adamsiellinae* subfam. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 70.



Acme, HESSE 249.

†Acme, HESSE 249.

*Annularia* with *Annularisca*, *Annularosa*, *Annularita*, *Annularella*, *Annularops*, *Annularodes* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 71-74.

*Annulariidae* fam. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 64.

*Annularinae* subfam. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 71.

*Blaesospira*, HENDERSON & BARTSCH 244.

*Chondropomatus*, *Chondropomium*, *Chondropometes*, *Chondropomartes*, *Chondropomorus* subgen. n. of *Chondropoma*, HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 59-61.

*Chondropominae* subfam. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 59.

*Chondrothyra* gen. n. with *Chondrothyrium*, *Chondrothyroma*, *Chondrothyra*, *Chondrothyretes* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 62-64.

*Cyclotus mamillaris* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 50.

*Diplommatina decaryi* sp. n. Madagascar, BAVAY & GERMAIN Bul. Mus. Paris 1920 p. 157.

*Diplopoma*, Pfr., HENDERSON & BARTSCH 244.

*Eutudora* gen. n. with *Eutudorisca*, *Eutudorella*, *Eutudora*, *Eutudorops* subgen. n. and *Eutudora* (*Eutudorops*) *azucarensis* sp. n. Cuba, HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 78 & 82.

*Jamaicia*, C. B. Ads., HENDERSON & BARTSCH 244.

*Leonia mamillaris* var. [? n.] *turriculata* Morocco, PALLARY J. conchyliol. 65 p. 140.

*Leptopoma maubanense makabengana* subsp. n. Philippines, BARTSCH Proc. U.S. Nation. Mus. 56 p. 306.

*Opisthosiphon* with *Opisthosiphona* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 67.—*O. maynardi* sp. n. Bahamas, VANATTA Proc. Acad. Nat. Sci. Philad. 72 p. 204.

*Omphalotropis aurata* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 50.—*O. (Stenotropis) subimperfata* sp. n. Society Isds., BOETTGER Abh. Senckenb. Ges. 36 p. 304.

*Parachondria*, Dall with *P. (P.) gonavicola* sp. n. Haiti, and *Parachondrisca*, *Parachondrella*, *Parachondrops* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 65-66 & 80.

*Ramsdenia*, Preston, HENDERSON & BARTSCH 244.

†*Rhiostoma americana* sp. n. Oregon Miocene, HANNA Univ. Oregon Publ. 1 p. 5.

*Rhytidopoma*, HENDERSON & BARTSCH 244.

*Rhytidopominae* subfam. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 64.

*Rhytidothyra* gen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 p. 65.

*Stoastoma domingensis* sp. n. Haiti, VANATTA Proc. Acad. Nat. Sci. Philad. 72 p. 206.

*Torrella* with *T. (Torrellisca) simpsoni* sp. n. Cuba; and *Torrellisca* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 69 & 80.

*Tudora* with *T. (T.) abbotti* sp. n. Haiti; and *Tudorellata*, *Tudorisca*, *Tudorops* subgen. n., HENDERSON & BARTSCH U.S. Nation. Mus. Proc. 58 pp. 75-77 & 81.

*Xenopoma*, HENDERSON & BARTSCH 244.

HIPPONYCIDÆ, CAPULIDÆ, XENOPHORIDÆ, NARICIDÆ, ADEORBIDÆ, LAMELLARIDÆ & NATIIDÆ.

†*Amauropsis*, MAURY 349.—A., ROMAN & MAZERAN 433.

†*Ampullina*, ROMAN & MAZERAN 433.—A., DIETRICH 165.

†*Calyptraea*, HUBBARD 265.—C., MAURY 349.

†*Capulidae*, YOKOYAMA 566.

†*Crucibulum* with *C. auricula* var. *portoricensis*, *C. (Dispotaea) collazum* var. & sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 133-134.

†*Diaphorostoma quadrangulare* sp. n. Devon U.S.A., DUNBAR New Haven Conn. Trans. Acad. Arts. Sci. 23 p. 147.

†*Hipponyx portoricensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 132.

*Lamellaria (Chelynotus) malarica* sp. n. Aru Isds., BOETTGER Abh. Senckenb. Ges. 35 p. 132.

†*Metoptoma gigantea* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 51.

*Natica*, HIRSCH 256.

†*Natica* with *N. substolida* var. n. *grandis* Miocene S. Australia, CHAPMAN Proc. R. Soc. Vict. 32 p. 239.—*N.* with *N. crassitesta* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 124.—*N.* with *N. (Ampullina) collazoensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 134.—*N. (Ampullina) gabbi*, *N. (Euspira) ramonensis*, *N. (Neverita) rectuziana andersoni* spp. & var. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 166.—*N.*, HENDERSON 242.—*N.*, MAURY 349.

†*Naticella americana* sp. n. Carbon. U.S.A., Girty Mem. Bur. Geol. Mines 13 p. 359.

†*Naticidae*, YOKOYAMA 566.

*Polinices catenoides*, sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 57.

†*Polyphemopsis gracilis, melanoides* spp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 pp. 46-47.—*P. melanoides* sp. n. Carbon, MANSUY Mem. Serv. géol. Indochine 3 p. 12.

†*Sigaretus inflatus* sp. n. Tertiary Timor, TESCH Pal. Timor 8 p. 67.

*Vanikoro hawaiiensis, kanakorum* spp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 373-374.

†[*Vanikoropsis*] *decussatus* sp. n. Lower Cretaceous Queensland, ETHERIDGE Qland. Geol. Surv. 269 p. 11.

†*Xenophora solariformis* sp. n. Tertiary Timor, TESCH Pal. Timor 8 p. 73.—*X.*, HUBBARD 265.—*X.*, MAURY 349.—*X.*, ROMAN & MAZERAN 433.

EPITONIIDÆ (*Scalidæ olim*).

*Cirsotrema soror* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 35.

†*Confusiscala ucharuensis* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 39.

*Epitonium* with *E. kanemoe, ulu, oahuense* spp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 275-276.

†*Epitonium pinolensis, ventricosum* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 164.—*E.* with *E. (Cirsotrema) collazoensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 135.

†*Scala* with *S. (Spiniscala) oakleyensis, (Lepidoscala) cavelli, (Fuscoscala) moorei, (Gyroscale) canhami, inedita* spp. n. Pliocene, HARMER Plioc. Moll. 2 pp. 527-558.

†*Scalaria verbeeki, molengraaffi* spp. n. Tertiary Timor, TESCH Pal. Timor pp. 62-63.

†*Scalaridae*, YOKOYAMA 566.STROMBIFORMIDÆ (*Eulimidæ olim*) & PYRAMIDELLIDÆ.

†*Eulimidæ* [? *Eulimidæ*], YOKOYAMA 566.

*Cambodia* gen. n. with *C. sinistrorsa* spp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 47.

*Eulima*, MAY 352.

†*Eulima lidacensis* sp. n. Tertiary Timor, TESCH Pal. Timor 8 p. 65.—*E.* with *E. minima, tenuissima* spp. n. Pliocene, HARMER Plioc. Moll. 2 pp. 587-592.—*E.*, ROMAN & MAZERAN 433.

*Odostomia (Chrysallida) hiloensis* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 299.—*O. (Chrysallida) zeteki* sp. n. Panama, BARTSCH Proc. U.S. Nation. Mus. p. 572.—*O. (Chrysallida) euglypta, Evalea edmondi* spp. n. California, JORDAN U.S. Nation. Mus. Proc. 58 pp. 2 & 3.

†*Odostomia* with *O. densa, fastigiata* spp. n. Pliocene, HARMER Plioc. Moll. 2 pp. 599-604.

*Protostylus* gen. n. with *P. lantenoisi*, *dussaulti* spp. n. Carbon., MANSUY Mem. Serv. géol. Indochine 3 pp. 11-12.

†*Pyramidella portoricensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 140.—*P. (Elusa) subglabra* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 16.

†*Pyramidellidae*, YOKOYAMA 566.

*Stylifer* with *S. deformis hawaiiensis*, *S. d. remotissimus*, *S. thaunumi* subsp. & sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 296-299.

†*Turbonilla* with *T. kendalli*, *expallida*, *dubiosa*, *parvula*, *T. (Pyrgostelis) varicula* var. *expansa*, *T. (P.) ignota*, *T. (Pyrgolidium) internodula* varr. *acuminata* and *conica* spp. & varr. n. Pliocene, HARMER Plioc. Moll. 2 pp. 559-575.

†*Vernedia*, ROMAN & MAZERAN 433.

#### PROSERPINIDÆ & HELICINIDÆ.

*Georissa detrita* sp. n. Madagascar, BAVAY & GERMAIN Bul. Mus. Paris 1920 p. 158.

*Helicina abbotti* sp. n. Haiti, VANATTA Proc. Acad. Nat. Sci. Philad. 72 p. 205.—*H. deppeana parvidens* subsp. n. Costa Rica, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 p. 3.—*H. oaxacana* sp. n. Mexico, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 p. 196.

†*Helicina oregona* sp. n. Oregon Miocene, HANNA Univ. Oregon Publ. 1 p. 4.

*Schasicheila hinkleyi* sp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 221.—*S. walkeri* sp. n. Guatemala, HINKLEY Nautilus 34 p. 53.

#### NERITIDÆ, NERITOPSIDÆ, TURBINIDÆ, TROCHIDÆ & ORBITESTELLIDÆ (*Cyclostrematidæ olim*).

†*Calliostoma portoricensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 129.—*C. lawsoni* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 163.—*C.*, DIETRICH 165.

*Cantharidella dolorosa*, HEDLEY 236.

†*Chrysostoma staffi*, sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 122.

†*Clanculus*, ROMAN & MAZERAN 433.

†*Cyclostrematidae*, YOKOYAMA 566.

†*Delphinula* with *D. pelossei* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 32-33.

*Discopsis panamensis, argentea* spp. n. Panama, BARTSCH Proc. U.S. Nation. Mus. 54 p. 574.

*Leptothyra* with *L. balnearii, varia* spp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 377-379.

†*Liotia (Arene) coronata* var. *portoricensis* var. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 131.

†*Margarita böhmi* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 121.

*Margarites umbilicalis spiralis* var. n. Arctic Seas, BAKER N.Y. Bul. Amer. Mus. Nat. Hist. 41 p. 504.—*M. ecarinatus* sp. n. Arctic, DALL Rept. Can. Arct. Exp. 8 p. 22A.

*Monodonta (Trochocochlea) crassa* var. n. *jacuriana* Tangier, COEN Atti Soc. Ital. Sci. Nat. 58 p. 304.

†*Monodonta allardi* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 36.

*Minolia variegata* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 32.

†*[Minolia] cretacea* sp. n. Lower Cretaceous Queensland, ETHERIDGE Qland. Geol. Surv. 269 p. 14.

†*Naticopsis hologyroides* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 42.—*N. obliqua* sp. n. Carbon N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 362.—*N. scintilla* sp. n. Carbon U.S.A., GIRTY Miss. Bur. Geol. Mines 13 p. 358.—*N. (?) diminuta* sp. n. Permian U.S.A., STAUFFER & SCHROYER Ohio Geol. Surv. 22 p. 145.

†*Nerita* with *N. (Lissochilus) stremmei* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 126.—*N. (Odontostoma) bruni* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 38.

*Neritilia* with *N. succinea guatemalensis* subsp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 pp. 219-220.

*Neritina marteli* varr. [? n.] ex colore, marmorata, nigra, violacea, rubra, lutea Morocco, PALLARY J. conchyliol. 65 pp. 154-155.

†*Neritina collazoensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 132.

†*Neritopsis* with *N. Des Gayetsi* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 36-37.

*Orbitestella iredalei* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 65.

*Phasianella pullus* varr. n. pallida, griseola France, DAUTZENBERG J. conchyliol. 65 p. 56.—*P. zigzag* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 31.

†*Phasianella*, ROMAN & MAZERAN 433.

†*Photinula*, DIETRICH 165.

†*Straparollus davidis* sp. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 361.

†*Trachydomia deprati* sp. n. Permian MANSUY Mem. Serv. géol. Indochine 3 p. 44.

†*Trochidae*, YOKOYAMA 566.

†*Trochus remesi* sp. n. Eocene, OPPENHEIM Wien Verh. Geol. Reichsanst. 1914 p. 195.—*T. dumasi*, *mingaudi* spp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 34.—*T.* with *T. brancai*, *T. (Tectus) langei* spp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 pp. 118-119.—*T. (Monilea) wanneri*, (*Euchelus*) *sphaericus* spp. n. Tertiary Timor, TESCH Pal. Timor 8 pp. 75-76.

†*Turbinidae*, YOKOYAMA 566.

†*Turbo fetkii*, *dominicensis* var. *quebradillensis* sp. & var. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 129.

*Zalapaia*, MAY 352.

STOMATIDÆ, COCCULINIDÆ, HALIOTIDÆ  
PLEUROTOMARIDÆ, BELLEROPHON-  
TIDÆ & FISSURELLIDÆ.

†*Baylea dilatata* sp. n. Carbon, MANSUY Mem. Serv. géol. Indochine 3 p. 10.

†*Bucania* with *B. evoluta*, *gravida*, *playfairi* spp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 30-33.—*B. nodulosa* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 38.

†*Bucaniella* with *B. quadrisulcata* sp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 28-30.

†*Conradella* with *C. girvanensis*, *sladensis*, *C. ? multilineata* spp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 44-47

†*Cyrtolites* with *C. budleighensis*, *cragensis*, *nodosus* var. *llandoveriana*, *C. thraivensis* spp. & var. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 23-27.

†*Fissurellidae*, YOKOYAMA 566.

†*Goniospira* gen. n. type *Murchissonia lasallensis*, GIRTY Miss. Bur. Geol. Mines 13 p. 356.

†*Isoispira huttoni* sp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 p. 27.

†*Kokenospira* with *K. creditilis*, *euphemoides*, *latidorsata*, *lingualis* var. *girvanensis*, *maccullochi*, *mullochensis*, *nicholsoni* spp. & var. n. Ordovician REED Brit. Ord. Sil. Belleroph. 1 pp. 33-41.

†*Mourlonia* with *M. ornata* sp. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 357.

†*Murchissonia dussaulti* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 40.—*M. missouriensis* sp. n. Carbon. U.S.A., GIRTY Miss. Bur. Geol. Mines 13 p. 355.

†*Oxydiscus* with *O. bougangensis*, *hunteri* spp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 18-23.

†*Phanerotrema australis* and var. *alta* sp. & var. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 359.

†*Pleurotomaria loatienensis* sp. n. Carbon., MANSUY Mem. Serv. géol. Indochine 3 p. 9.—*P.* with *P. janenschii* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 118.—*P. ? per simplex* sp. n. Carbon. U.S.A., Girty Miss. Bur. Geol. Mines 13 p. 355.

†*Ptycomphalus cullenii* sp. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 356.

†*Scissurella mödlingensis* form. n. Miocene Austria, TOULA Wien Verh. Geol. RchsAnst. 1918 p. 199.

†*Sinuities* with *S. balclatchiensis*, *discoïdes*, *maccallumi*, *pseudocompressus*, *pusgillensis*, *sondleyensis*, *subrectangularis*, *separatus*, *sphaeroidalis* spp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 4–17.

†*Sinitopsis* with *S. congruens* sp. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 17–18.

*Stomatella concinna inconcinna* subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 380.

†*Temnodiscus* with *T. fletcheri* Silurian *T. monilifer* spp. n., REED Brit. Ord. Sil. Belleroph. 1 pp. 47–48.

†*Tetranota* with *T. carrickensis*, c. varr. *craigensis* and *etheridgei* sp. & varr. n. Ordovician, REED Brit. Ord. Sil. Belleroph. 1 pp. 41–43.

†*Worthenia pagoda* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 39.

#### ACMÆIDÆ & PATELLIDÆ.

†*Acmaeidae*, YOKOYAMA 566.

†*Cryptoctenidia magna* sp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125–c. p. 30.

*Lepeta (Cryptoctenidia) lima* sp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 233.

†*Patella* with *P. kindopensis* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 116.

†*Patellidae*, YOKOYAMA 566.

*Patelloida corrodenda* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 66.

#### INCERTAE SEDIS.

†*Anthracopupa (?) dunkardana* sp. n. Permian U.S.A., STAUFFER & SCHROYER Ohio Geol. Surv. 22 p. 144.

*Apaturris costifera* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 56.

†*Aulopea* gen. n. with *A. nelsoni* sp. n. Devon U.S.A., DUNBAR New Haven Conn. Trans. Acad. Arts. Sci. 23 pp. 145–146.

*Cocculinella tasmanica* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 67.

†*Coelostylina wanneri* sp. n. Trias Timor, JAWORSKI Stuttgart Pal. Timor p. 129.

†*Distemnostoma* gen. n. with *D. princeps*, *curtum* spp. n. Devon U.S.A., DUNBAR New Haven Conn. Trans. Acad. Arts. Sci. 23 pp. 143–145.

†*Eulimene* with *E. pendula* var. n. parva Pliocene, HARMER Plioc. Moll. 2 pp. 594–597.

*Haplocochlias (Lophocochleas) minutissimus* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 377.

†*Hemizyga* subgen. n. *Zygopleura* with *H. dubia* sp. n. Carbon. U.S.A., Girty Miss. Bur. Geol. Mines 13 p. 361.

†*Holopea planidorsata* sp. n. Devon U.S.A., DUNBAR New Haven Conn. Trans. Acad. Arts. Sci. 23 p. 147.

†*Macrochilina acuminata* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 45.

*Nepotilla diaphana* sp. n. Tasmania, MAY Proc. R. Soc. Tasmania 1919 p. 56.

†*Phaneroptyxis africurgonica* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 146.

†*Saffordella* gen. n. with *S. tennesseensis* sp. n. Devon U.S.A., DUNBAR New Haven Conn. Trans. Acad. Arts. Sci. 23 pp. 141–142.

†*Telleria praecursor* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 45.

†*Trachynerita infranodosa* sp. n. Jura, KITTL Wien Ann. Nat. Hist. Hofmus. 20 p. 53.



†*Trajanella*, ROMAN & MAZERAN 433.

†*Yunnaniana meridionalis* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 41.

†*Zygopleura affinis, nana, teres* spp. n. Carbon. U.S.A., Girty Miss. Bur. Geol. Mines 13 pp. 359-360.

# Opisthobranchia (INCLUDING PTEROPODA.)

†*Actaeon kirkerensis* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 188.

*Actaeocina hawaiiensis* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 300.

†*Actaeonella*, DIETRICH 165.—A., ROMAN & MAZERAN 433.

*Aolidiella*, VAYSSIÈRE 510.

*Aglaja* with *A. pilsbryi hawaiiensis* subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 371-372.

*Archidoris (Staurodoris) maculata*, Gars. var. n. *lutea* Mediterranean, VAYSSIÈRE Ann. Mus. Marseille 17 p. 57.

*Atys* with *A. semistriata mua, s. fordinsulae, kekele* subsp. & sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 364-365.

†*Avellana*, DIETRICH 165.

†*Bucconia reedsi* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 76.

†*Bulla*, DIETRICH 165.

†*Bullaria* with *B. portoricensis* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 162.—B., MAURY 349.

*Bullina* with *B. scabra solida* subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 363.

†*Caryodoris* gen. n. with *C. joubini* sp. n. Mediterranean, VAYSSIÈRE Ann. Mus. Marseille 17 p. 67.

*Cavolinia*, MASSY 346.

*Chromodoris*, CROZIER 141 & 144.—C., VAYSSIÈRE 510.

*Cleodora*, MASSY 346.

*Clyone*, MASSY 346.

*Creseis*, MASSY 346.

*Cuvierina*, MASSY 346.

†*Cylichna ramonensis* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 188.

*Cylichnella bistrata* sp. n. S. Africa, TOMLIN J. Conch. Leeds 16 p. 87.—*C. zeteki* sp. n. Panama, BARTSCH Proc. U.S. Nation. Mus. 54 p. 571.

*Cymbulia*, NICK 370.

*Diacria*, MASSY 346.

*Dinia compitorum* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 364.

*Discodoris rubens* sp. n. Mediterranean, VAYSSIÈRE Ann. Mus. Marseille 17 p. 65.

*Doriopsilla*, VAYSSIÈRE 510.

*Favorinus*, VAYSSIÈRE 510.

*Haminea* with *H. olopana* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 367-370.—H., DRZWINA 172a.

†*Haminea* with *H. quebradilla* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 73

*Idalia* with *I. dautzenbergi* sp. n. Mediterranean, VAYSSIÈRE Ann. Mus. Marseille 17 p. 76.

*Lamellidoris bouvieri* sp. n. Mediterranean, VAYSSIÈRE Ann. Mus. Marseille 17 p. 72.

*Limacina*, MASSY 346.

*Melibe*, KJERSKOG-AGERSBERG 306.

*Opisthobranchia*, BOUTAN 69 & 70.—O., HAAS 225.—O., PELSENER 396.

*Peraclis*, MASSY 346.

*Phyllidia multiberculata* sp. n. Aru Isds., BOETTGER Abh. Senckenb. Ges. 35 p. 129.

*Platydoris*, VAYSSIÈRE 510.

*Pleurobranchaea novae-zelandiae*, MESTAYER 358.—P., HIRSCH 256.

*Pseudoderma*, MASSY 346.

*Pteropoda*, MASSY 347.

*Pterotrachea*, HIRSCH 256.—P., NICK 370.

†*Ringiculella* with *R. chateleti* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 71-72.

†*Ringiculidae*, YOKOYAMA 566.

†*Scaphandridae*, YOKOYAMA 566.

*Spongibranchaea*, MASSY 346.

*Styliola*, MASSY 346.

†*Tentaculites tenuissimus* sp. n. Silurian, HEDE Stockholm Geol. Förh. 40 p. 129.

*Tethys*, KRUMBACH 311.

*Tiedemannia*, NICK 370.

†*Tornatinidae*, YOKOYAMA 566.

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†*Cochlicopa subrimata* var. n. *procera* Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 p. 63.

*Ennea (Gulella) pallaryi*, Preston = *E. vriesiana*, ANCEY, FULTON London Proc. Malac. Soc. 14 p. 3.—*E.*, GUDE 222.

*Gastrodonta*, GUDE 222.—*G.*, HANNA 230.

†*Gibbulinella* gen. n., WENZ Frankfurt a. M. Senckenbergiana 2 p. 16.

†*Granöennea* gen. n., WENZ Frankfurt a. M. Senckenbergiana 2 p. 16.

*Paryphanta atramentaria*, BALE 34.

*Salasiella hinkleyi* Mexico; *S. guatemalensis* Guatemala spp. n., PILSBRY Proc. Acad. Nat. Sci. Philad. 71 pp. 212–213.

*Sesara*, GUDE 222.

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*Testacella haliotidea*, AMBAYRAO 3.—*T.*, KENNARD & WOODWARD 296.—*T.*, BOWELL 71.

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*Arion circumscriptus*, SCHLESCH 454.—*A. ater*, SCHLESCH 452.—*A. a.*, PECK 394.—*A.*, SIMROTH 467.

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*Euconulus sterkii*, VANATTA 504.

*Guppya calverti*, *costaricana*, *c. elatior*, spp. & subsp. n. Costa Rica, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 pp. 3–5.—*G. elegantula*, *jaisco* spp. n. Mexico, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 215.

*Helicarion* with *H. cryptophallus* sp. n. British East Africa, WATSON London Proc. Malac. Soc. 14 pp. 91–112.

†*Hyalinia (Hyalinia) subnitens* form. n. *recedens*, *H. (H.) s. var. n. erecta*, *H. (Gyalina) circumcisa* sp. n. Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 pp. 33–35.—*H. lucida*, MERMOD 356.—*H.*, CAZIOT & MAURY 112.

*Lamprocystis eucosmia* sp. n. Solomon Isds., BOETTGER Abh. Senckenb. Ges. 36 p. 288.

*Limacidae*, BÜTIKOFER 85.—*L.*, COLOSI 130.

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*Medyla (Coneuplecta) globulus* sp. n. Tonga Isds., BOETTGER Abh. Senckenb. Ges. 36 p. 289.

*Milax Sowerbyi* BUTTERELL 87.—*M.*, BOWELL 71.

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*Nanina (Xesta) hova* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 43.

*Nesonanina* gen. n. *N. wolfs* sp. n. Solomon Isds., BOETTGER Abh. Senckenb. Ges. 36 p. 288.

†*Omphalosagda maxima* sp. n. Tertiary Germany, WENZ Frankfurt a. M. Senckenbergiana 1 p. 70.

*Pseudohyalina maya* Guatemala; *opal*. Nicaragua spp. n., PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 216.

d/ *Simrothia* sec. n. *Limax*, CLESSIN Deutsch. Excur. Moll. Fauna 2nd ed. 1884.

*Vitrea (Paravitrea) multidentata* and *lamellidens*, CLAPP 119.—*V.*, GUDE 222.—*V.*, LAWSON 321.

†*Vitrea (Vitrea) procrystallina* var. n. *steinheimensis* Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 p. 37.

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*Xestina granulosa*, Mildff. = *Helix danae*, Pfr., FULTON London Proc. Malac. Soc. 14 p. 3.

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*Zonitoides bregyi* sp. n. Cuba, VANATTA Proc. Acad. Nat. Sci. Philad. 72 p. 203.  
—Z., nummus, CLAPP 123.

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*Albea* with *A. marteli* form [n. ?] tenuis Morocco, PALLARY J. conchyliol. 65 pp. 7–10.

*Alabastrina* with *A. soluta* varr. [? n.] globulosa, minor Morocco, PALLARY J. conchyliol. 65 pp. 23–24.

†*Ammonitella*, HANNA 230.

*Ampelita bizonalis* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 49.

*Archelix* with *A. faux nigra* varr. [? n.] unicolor-alba, minor; *A. sphaeromorphia* varr. [? n.] albicans, quinquefasciata, lineolata, minor, depressa subangulata; *A. ahmarina* var. [? n.] minor; *A. ibrahimi* var. [? n.] minor; *A. alabastra* var. n. zonata Morocco, PALLARY J. conchyliol. 65 pp. 31–37.

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*Burmochloritis* gen. n. *B. Kengtungensis* sp. n. Burma, GODWIN-AUSTEN Rec. Ind. Mus. Calcutta 19 pp. 9–11.

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†*Cepaea eversa larteti*, WENZ 543.

*Chlorea*, BARTSCH 41.

*Chelicella* with *C. barbara* var. [? n.] raphidia Morocco, PALLARY J. conchyliol. 65 pp. 20–22.—*C. barbara*, WATSON 526.

*Cochlostyla lignaria aguinaldoi*, macrostoma vizcayana, carinata lunai, luzonica makabengana, domingoi, schad-

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*enbergi ilongata* sp. & subsp. n. Philippines, BARTSCH Proc. U.S. Nation. Mus. 56 pp. 301–304.

*Corilla*, GUDE 222.

*Cryptomphalus*, PALLARY 391.

†*Dentellocaraculus*, WENZ 534.

*Epiphragmophora cuyamacensis lowei*, traskii isidroensis subsp. n. S. California or Mexico, BARTSCH Proc. U.S. Nation. Mus. 54 pp. 523–524.—*E. tudiculata allyniana*, traskii chryso-derma, willetti, petricola orotes, sanga-brielis subsp. n. California, BERRY Proc. Acad. Sci. Cal. 10 pp. 54–64.

†*Epiphragmophora*, HANNA 230.

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†*Galactochiloides* subgen. n. [*Helicidae*], WENZ Frankfurt a. M. Senckenbergiana 1 p. 68.

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†*Helicites sylvestrinus*, WENZ 541.

*Helicogena pomatia-burmesteri*, pomatia-brenaensis spp. n. Macedonia, BLUME Nachr. D. malakozool. Ges. 52 pp. 90–91.—*H. arbustorum* var. bifasciata, KNIGHT 309.

*Helicodonta*, GUDE 222.

*Helix hortensis* var. aurantia-lutea var. n. France, TAYLOR J. Conch. Leeds 16 p. 109.—*H. (Tachea) h.*, BUCHNER 77.—*H. aspersa*, CAZIOT 105.—*H. a.*, LAWSON 322.—*H. a.*, MATISSE 348.—*H. a.*, SCHUT 458 & 459.—*H. a.*, VAN RIJNBERK 508.—*H. a.*, VELOSO 512 & 513.—*H. a.*, WATSON 526.—*H.* with *H. venneri* sp. n. France, CAZIOT Nice Riv. Sci. 1 No. 5 1914 pp. 37–38.—*H. acuta*, subrufescens, fusca, hammonis, KENNARD & WOODWARD 296.—*H. cantiana*, DUNLOP 175.—*H. derogata*, buchi adsharica, HESSE 250.—*H. nemoralis*, KLÄHN 307.—*H. pomatia*, BANG 35.—*H. p.*, COGNETTI DE MARTIS 127.—*H. p.*, KUNZE 313.—*H. p.* JUNG 567.—*H. subpampelonensis*, CAZIOT 101.—*H. niciensis*, CAZIOT 109.—*H. (Fruticicola) suberina*, CAZIOT 108.—*H. (Obba)*, OPPENHEIM 381.—*H. (O.)*, THUMA 486.

†*Helix* with *H. gignoux* sp. n. Quaternary France, CAZIOT & MAURY Nice Riv. Sci 6 No. 3 1919 pp. 129-131; 6 No. 4 1919 pp. 159-160.

†*Hygromia* (*Trichiopsis*) *kleini* form. n. *scalaris* Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 p. 42.

†*Megalocochlea* gen. n. [*Helicidae*], WENZ Frankfurt a. M. Senckenbergiana 1 p. 68.

*Metodontia*, GUDE 222.

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*Patula rupestris*, CAZIOT 108.

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*Plectopylis*, GUDE 222.

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†*Pleurodonte debooyi* sp. n. Quaternary St. Croix, BARTSCH Proc. U.S. Nation. Mus. 54 p. 605.

*Polygyra*, GUDE 222.

†*Polygyra multilineata altonensis*, *profunda pleistocenica* var. n. Pleistocene U.S.A., BAKER Nautilus 34 pp. 65 & 66.—P., HANNA 230.

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†*Polygyrella*, HANNA 230.

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†*Prothelidomus*, WENZ 534.

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*Pyramidula picta* sp. n., *P. Cumberlandiana* with *P. c. alabama*, *columba* var. n. U.S.A., CLAPP Nautilus 34 pp. 23-25.—*P. rupestris* var. n. *nylanderi* Maine, MORSE Nautilus 34 pp. 58-59.—P., LAWSON 321.—P., WATSON 525.

†*Pyramidula*, HANNA 230.

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*Strobilops strebeli* subsp. n. *guatemalensis* Guatemala, HINKLEY Nautilus 34 p. 52.

†*Strobilops*, WENZ 535.

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*Tachea nemoralis* with var. n. *tricolor* France, FRANZ Zool. Anz. 48 pp. 292-299.—*T. nemoralis*, *hortensis*, *austriaca*, ZIMMERMANN 570.—T., CAZIOT 97.

*Thysanophora rhoadsi* sp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 217.—*T. textilis* sp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 p. 196.

*Tingitana* with *T. minettei* varr. [? n.] *major*, *elata*, *minor*, *depressa*, *cristaria*, *zonata*; *T. gharbiana* var. [? n.] *major*; *T. Mangini* ? sp. n.; *T. bessabisana* varr. [? n.] *angulosa*, *concolor*; *T. tingitana* varr. [? n.] *minor*, *major*, *globulosa*, *pullata*, *punctulata*, *interrupta* Morocco, PALLARY J. conchyliol. 65 pp. 25-31.

†*Tropidomphalus* (*Pseudochloritis*) *vindobonensis* sp. n. Miocene Austria, WENZ Frankfurt a. M. Senckenbergiana 2 p. 111.

*Turbo bidentatus*, KENNARD & WOODWARD 296.

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†*Vallonia subcyclophorella* var. n. *major*, *V. lepida* var. n. *steinheimensis* Tertiary Germany, GOTTSCHICK Nachr. D. Malak Ges. 52 pp. 54 & 58.

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†*Xerophila striata* form n. *minor* Quaternary Germany, GEYER Stuttgart Jahreshefte Ver. Natk. 73 p. 65.

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*Bulimulus* (*Drymaeus*) *pulcherrimus*, Ad. = *subhybridus*, Da Costa, FULTON London Proc. Malac. Soc. 14 p. 3.

*Bulimus* (*Borus*) *lacunosus* form n. *sinistralis* Peru, BLUME Nachr. D. malakozool. Ges. 52 p. 129.

*Liguus solidus* *crassus*, s. *lineatus*, s. *pseudopictus*, s. *delicatus*, *crenatus* *capensis*, c. *vacaensis*, c. *eburneus*, c. *mosieri*, c. *cingulatus*, c. *luteus*, *fasciatus alternatus*, f. *ornatus*, f. *miamiensis*, f. *livingstoni*, f. *elegans*, f. *lineolatus*, f. *versicolor*, f. *castaneus* subssp. n. Florida, SIMPSON Washington Proc. biol. Soc. 33 pp. 121–126.

*Partula* with *P. mathildae* sp. n. Solomon Isds., BOETTGER. Abh. Senckenb. Ges. 36 pp. 295–296.—P., CRAMPTON 138.

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*Gastrocopta* (*Falsopupa*) *madagascariensis* sp. n. Madagascar, BAVAY & GERMAIN Bul. Mus. Paris 1920 p. 156.—*G. colombiana* sp. n. Colombia, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 329.—*G.*, PILSBRY 411.

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†*Leucochilus*, WENZ 542.

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†*Lyropupa* with *L. lyrata fossilis*, *L. antiqua*, *cyrtia* subsp. & spp. n. Pleistocene Hawaii, PILSBRY Man. Conch. 25 pp. 236 250 268.

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†*Miopychia* subgen. n., WENZ Frankfurt a. M. Senckenbergiana 2 p. 19.

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†*Neniopsis* gen. n., WENZ Frankfurt a. M. Senckenbergiana 2 p. 18.

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†*Palaeophaedusa* gen. n., WENZ Frankfurt a. M. Senckenbergiana 2 p. 18.

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†*Pupoides wenzii* sp. n. Miocene Germany, FISCHER Nachr. D. malak. Ges. 52 p. 93.—P., WENZ 542.

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*Ferussacia* with *F. marteli* sp. [? n.] Morocco, PALLARY J. conchyliol. 65 pp. 135-136.

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*Spiraxis livingstonensis*, longior spp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 pp. 213-214.

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†*Aplexa subhynorum* sp. n. s. *physaeformis* form. n. Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 p. 116.

*Auriculidae*, BÜTIKOFER 85.

*Bullinus* with *B. prinsepii* race n. *euryhyalinus* Cretaceous Baluchistan, ANNANDALE Rec. Geol. Surv. India 51 pp. 55–62.—*B. sisurnius* sp. n. North-West Australia, HEDLEY R. Geog. Soc. Aust. S.A. Branch Proc. 18 p. 282.—*B.*, ANNANDALE 6.—*B.*, GERMAIN 202.

*Campioceras* with *C. subspinosum* sp. n. Kashmir, ANNANDALE & PRASHAD J. & Proc. As. Soc. Beng. 16 pp. 27–33.

*Ferrissia bartschi* sp. n. Indiana, WALKER Proc. U.S. Nation. Mus. 57 p. 525.

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†*Hippentis subfontanus* form. n. *latior*, *H. fasciata* sp. n. Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 pp. 170–171.

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*Physopsis africana*, PORTER 412.

*Planorbidae*, BÜTIKOFER 85.

*Planorbis pseudotrivolvis* sp. n. Illinois, BAKER Nautilus 33 p. 123.—*P. tenuis chapalensis*, *contrerasi* subsp. & sp. n. Mexico, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 pp. 192–193.—*P. dilatatus*, JACKSON & KITCHEN 280.—*P. glaber*, CAZIOT 110.—*P.*, MAGATH 329.—*P.*, MANSON-BAHR & FAIRLEY 351.

†*Planorbis*, HENDERSON 242.

*Segmentina congenera* sp. n. Aru Isds., BOETTGER Abh. Senckenb. Ges. 35 p. 127.—*S.*, MAY 352.

†*Segmentina larteti* form. n. *planata* Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 p. 172.

*Siphonaria madagascariensis* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 20.

†*Stoliodoma*, WENZ 544.

*Succinea panamensis* sp. n. Panama, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 218.—*S. oblonga*, DRAP., GARDINER 198.—*S.*, MAGATH 329.

†*Succinea (Amphibina) minima* form. n. *subpfeifferi* Tertiary Germany, GOTTSCHICK Nachr. D. malakozool. Ges. 52 p. 65.

*Succineidae*, BÜTIKOFER 85.

†*Tralia*, WENZ 544.

*Uncancylus calverti*, *ameliae* spp. n. Costa Rica, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 pp. 7–9.

INCERTÆ SEDIS.

*Dendrotrochus* with *D. vicarius* sp. n. S. Pacific, BOETTGER Abh. Senckenb. Ges. 36 p. 289.

†*Rgytidopilus obliquus* sp. n. Jura E. Africa, DIETRICH Berlin Arch. Biontol. 3 p. 114.

## Scaphopoda.

*Cadulus* with *C. (Polyschides)* *quadridentatus acompsus* subsp. n.; *Platyschides* subgen. n. *C. (P.) elephas, catharus, parvus, foweyensis, portoricensis, rushi arne, providensis, elongatus, greenlawi, arctus, brazilensis, simpsoni, nitidus, miamiensis* spp. & subsp. n.; *C. Gadila mayori, iota, subula, verrilli, regularis, atlanticus, C. (Cadulus) transitorius, t. transitorius, t. barbadensis, platensis, podagrinus, halius, tersus* spp. & subsp. n. East Coasts of America, HENDERSON U.S. Nation. Mus. Bull. 111 pp. 11 95-149.

†*Cadulus poncensis* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 47.—*C. arcticus* sp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125-c p. 30.

†*Dentaliidae*, YOKOYAMA 566.

*Dentalium* with *D. (D.) laqueatum regulare, texasianum, cestum, t. rioense, gouldii portoricense, g. colonense* subsp. n.; *D. (D.) rebeccaense* sp. n.; *D. (Antalis) entale simpsoni, D. (A.) agile subagile* subsp. n.; *D. (A.) occidentale georgiense* nom. n. for *D. o. sulcatum*, Ver.; *D. (A.) ceratum flavum, D. (A.) c. tenax* subsp. n.; *D. (A.) bariletti, tubulatum* spp. n.; *D. (Fissidentalium) meridionale jamaicense* subsp. n.; *D. (F.) m. verrilli* nom. n. for *D. solidum*, Ver.; *D. (F.) floridense, D. (Graptacme) amaliense* spp. n.; *D. (Episiphon) soverbyi pelliceri* subsp. n. East Coast of America, HENDERSON U.S. Nation. Mus. Bull. 111 pp. 8 22-86.

†*Dentalium radiolineata* and *r. sobrantensis* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 191.—*D. diazicum* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 46.—*D.*, HUBBARD 265.—*D.*, ROMAN & MAZERAN 433.

*Entalina* with *E. quadrata* sp. n. off Grenada, HENDERSON U.S. Nation. Mus. Bull. 111 pp. 10 87-88.

†*Entaliscris status* sp. n. Permian MANSUY Mem. Serv. geol. Indochine 3 p. 52.

*Scaphopoda*, PELSENEER 396.

*Siphonodentalium* with *S. (S. ?) striatum, S. (S.) verrilli, S. (Pulsellum) occidentale, bushi* spp. n. East Coast of America, HENDERSON U.S. Nation. Mus. Bull. 111 pp. 10 88-94.

## Pelecypoda or Lamellibranchia.

## GENERAL.

*Lamellibranchia*, PELSENEER 396.

*Pelecypoda*, BURNE 83.

## TETRABRANCHIA.

## OSTRACEA.

†*Alectryonia*, ROMAN & MAZERAN 433.—*A.*, LANGE 319.

†*Anomia inconspicua* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 133.—*A.*, HENNIG 246.

†*Anomiidae*, YOKOYAMA 566.

†*Exogyra*, ROMAN & MAZERAN 433.—*E.*, LANGE 319.

†*Gryphaea bubo* sp. n. Jura E. Africa, HENNIG Berlin Arch. Biontol. 3 p. 179.

*Ostrea edulis* with *O. e. varr. n. celtica, estuarii, tenbiensis, O. atlantica* British Seas *O. cantii* spp. n., BELL Essex Nat. 19 pp. 183-208.

†*Ostrea* with *O. sellaeformis* var. *portoricensis, cahobasensis* var. *portoricana* varr. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 98-102.—*O.* with *O. collazica, berkeyi, sansebastiana* spp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 13-15.—*O. darestei* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 106.—*O.*, BELL 50.

†*Ostreidae*, YOKOYAMA 566.

## PECTINACEA.

†*Amusium* with *A. mauryi* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 96.—*A.*, MAURY 349.

†*Camptonectes*, ROMAN & MAZERAN 433.

†*Chlamys*, ROMAN & MAZERAN 433.—*C.*, LANGE 319.

†*Entolium*, HENNIG 246.

†*Hinnites* with *H. equinus* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 pp. 314-316.

†*Lima*, ROMAN & MAZERAN 433.—*L.*, HENNIG 246.—*L.*, LANGE 319.

†*Limatula tendagurensis* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 p. 207.

†*Limidae*, YOKOYAMA 566.

†*Neithea*, ROMAN & MAZERAN 433.

*Pecten kincaidi*, *islandicus pugelensis* sp. & var. n. W. Coast N. America, OLDBOYD Nautilus 33 pp. 135-136.—*P. purpuratus*, GIGOUX 209.—*P.*, BUDENBROCK 180.

†*Pecten* with *P. guanicus*, *meseticus*, *camuyensis*, *sansebastianus* & var. *laresianus*, *guajatacus* spp. & var. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 16-20.—*P.* with *P. laresense*, *P. (Eurolva) reliquus* var. *portoricoensis*, *P. (Chalmys) collazoensis*, *portoricoensis* with var. *reticulatus* and *grandis*, *grabani* with var. *aguadensis*, *hatoensis* & *guayabensis*, *hodgii*, *P. (Aequipecten) lobecki*, *P. (Plagiocentium) rabelli*, *borinquenense* spp. & var. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 85-95.—*P.* with *P. misolensis glabra* var. n. Trias Timor; *P. krumbeki* nom. n. for *P. microglyptus*, W. & B., JAWORSKI Stuttgart Pal. Timor 1915 pp. 96-102.—*P. (Amussium) donaiensis* sp. n., Lias, MANSY Mem. Serv. géol. Indochine 3 p. 37.—*P.* with *P. (Camptonectes) euplocus* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 pp. 208-211.—*P. (Chlamys)* with *P. kindlei* sp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125-c pp. 30-31.—*P. (Lyropecten) gabbi*, *P. (Pseudomuscum) [sic] alternilineatus* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 131-132.

†*Pectinidae*, YOKOYAMA 566.†*Plicatula*, ROMAN & MAZERAN 433.

†*Propeamusium hollicki* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 21.

*Pseudamussium andersoni* sp. n. Arctic, DALL Rept. Can. Arct. Exp. 8 p. 19A.

†*Radula tumida* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 p. 206.

*Spondylus gaedaropus*, DEZ 172.

†*Spondylus* with *S. lucasi* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 22-23.—*S.*, HUBBARD 265.—*S.*, ROMAN & MAZERAN 433.

†*Syncyclonema matheroni* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 89.

†*Vola*, LANGE 319.

## MYTILACEA.

†*Atrina rabelli* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 85.

†*Avicula*, LANGE 319.

*Edentellina* with *E. corallensis* sp. n. Queensland, HEDLEY London Proc. Malac. Soc. 14 pp. 74-76.

†*Gervilleia* [vide etiam *Gervillia*], ROMAN & MAZERAN 433.

†*Gervillia* [vide etiam *Gervilleia*] *frici*, *jahni*, *zahálskai*, *erecta*, *minuta* spp. n. Upper Cretaceous Bohemia, ŽELIZKO Wien Jahrb. Geol. RchsAnst. 63 pp. 120-121.—*G.* with *G. bohmica*, *aurita*, *gibbera* spp. n. Upper Cretaceous Bohemia, ŽELIZKO Wien Jahrb. géol. RchsAnst. 66 pp. 277-280.—*G. stantoni* sp. n. Cretaceous Canada, MCLEARN Can. Field. Nat. 34 p. 55.—*G.*, LANGE 319.

†*Inoceramus*, ROMAN & MAZERAN 433.—*I.*, HENNIG 246.

†*Lithophaga*, HUBBARD 265.—*L.*, MAURY 349.

*Modiolus* with *M. matris* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 321.—*M.*, LAMY 315.

*Modiolus kirkerensis*, *pittsburgensis* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 133-134.—*M.*, HENNIG 246.—*M.*, LANGE 319.

*Mytilidae*, YOKOYAMA 566.

*Mytilus edulis*, HERDMAN 247.—*M. e.*, SPÄRCK, 469a.—*M.*, LAMY 316.

†*Mytilus arnoldi* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 135.—*M.*, LANGE 319.

†*Perna*, ROMAN & MAZERAN 433.

†*Posidonomya* with *P. becheri* var. n. *siamensis* Carbon. Siam, REED Geol. Mag. 57 pp. 117-119.

†*Pseudomonotis tendagurensis* sp. n. Jura E. Africa, HENNIG Berlin Arch. Biontol. 3 p. 182.

†*Pteria*, MAURY 349.

†*Pterinea mieleensis* sp. n. Ordovician, MANSUY Mem. Serv. géol. Indochine 4 p. 13.

## ARCACEA.

†*Acila* with *A. muta*, *m. markleyensis* sp. & var. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 119-122.

*Arca*, MAY 352.

†*Arca* (*Scapharca*) *mediainpressa*, *submontereyana* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 127-128.—*A.* with *A.* (*Scapharca*) *guajatica*, *aguadica*, *collazica*, *sansebastianiana* spp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 6-11.—*A.*, HUBBARD 265.—*A.*, ROMAN & MAZERAN 433.

†*Arcidae*, YOKOYAMA 566.

†*Barbatia*, ROMAN & MAZERAN 433.—*B.*, MAURY 349.

*Congerina bryanae* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 323.

†*Cucullaea iritans* sp. n. Jura E. Africa, HENNIG Berlin Arch. Biontol. 3 p. 175.—*C.* with *C. turonica* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 81-82.—*C.*, LANGE 319.

*Leda perlonga* sp. n. Mesozoic Indo China, MANSUY Mem. Serv. géol. Indochine 3 p. 82.—*L.* (*Portlandia*) *collinsoni* sp. n. Arctic Ocean, DALL Rept. Can. Arct. Exp. 8 p. 19A.

†*Leda elongorostrata*, *markleyensis*, *pulchrisinuosa*, *ramonensis* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 123-124.—*L.*, HUBBARD 265.

†*Ledidae*, YOKOYAMA 566.

†*Limopsidae*, YOKOYAMA 566.

†*Macrodon rectangulus* sp. n. Permian, MANSUY Mem. Serv. géol. Indochine 3 p. 36.

†*Malletia packardi* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 125.

*Nucula hawaiiensis* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 327.—*N. rugosa* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 23.

†*Nucula misolensis* sp. n. Trias Timor, JAWORSKI Stuttgart Pal. Timor 1915 p. 106.—*N. postangulata*, *bifida* spp. n. Oligocene U.S.A., CLARK Univ. Cal.

Pub. Bul. Dept. Geol. 11 p. 122.—*N.* with *N. africana* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 p. 223.—*N.*, HENDERSON 242.—*N.*, ROMAN & MAZERAN 433.

†*Nuculidae*, YOKOYAMA 566.

†*Nuculites* with *N. pholus*, *ladon*, *nessus*, *lichas*, *subplanus*, *trescottii*, *robustus*, *crassus*, *speciosus*, *abnormis*, *chrysippus*, *atreus*, *thyestes*, *amycus*, *battus*, *galeus*, *pelops*, *eurylochus*, *lentus* spp. n. Silurian Maine, WILLIAMS Proc. U.S. Nation. Mus. 54 pp. 32-46.

†*Parallelodontidae*, YOKOYAMA 566.

*Pectunculus mertonii* sp. n. Aru Isds., BOETTGER Abh. Senckenb. Ges. 35 p. 138.

†*Pectunculus*, ROMAN & MAZERAN 433.

*Thecondonta* (?) *symmetrica* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 327.

†*Trigonia* with *T. strennei*, *krenkeli*, *mongalensis*, *dietrichi*, *janenschii*, *staffi*, *hennigi* spp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 pp. 224-239.—*T.*, ROMAN & MAZERAN 433.—*T.*, HENNIG 246.

†*Trigonoarca*, ROMAN & MAZERAN 433.

*Yoldia divaricata* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 24.

†*Yoldia cooperi tenuissima* var. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 125.

## SUBMYTILACEA.

†*Astarte actis*, *carteriana*, *leffingwelli*, *martini*, *hemicymata*, *A.* (*Gonilia* ?) *diversa* spp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125-c pp. 31-33.—*A. gaillardi* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 93.—*A. grandidentata* sp. n. Jura E. Africa, LANGE Arch. Biontol. 3 p. 240.—*A.*, HENNIG 246.

†*Astartella compacta* sp. n. Carbon. U.S.A., Girty Miss. Bur. Geol. Mines 13 p. 254.

†*Astartidae*, YOKOYAMA 566.

†*Cardinia*, KRUMBECK 312.

†*Cardita* with *C. ? comitatensis* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 p. 98.



†*Carditidae*, YOKOYAMA 566.

†*Crassatillidae*, YOKOYAMA 566.

†*Crassatellites juanadiazus* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 27.

†*Eriphyla*, LANGE 319.

†*Glossites* (?) *belmontensis* sp. n. Permian U.S.A., STAUFFER & SCHROYER Ohio Geol. Surv. 22 p. 144.

†*Pachycardia rudis* sp. n. Trias, MANSUY Mem. Serv. géol. Indochine 3 p. 32.

†*Penrophorus* (?) [? *Pleurophorus*] *ohioensis* sp. n. Permian U.S.A., STAUFFER & SCHROYER Ohio Geol. Surv. 22 p. 143.

†*Prosocoelus benshauseni aequalva*, *pesanseri percarinatus* varr. n. Devon, RICHTER & RICHTER Wiesbaden Jahrb. Ver. Natk. 70 pp. 153–155.

†*Ptychomya kitchini* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 p. 242.

*Venericardia* (*Cyclocardia*) *morsei*, *hirasei* spp. n. Pacific, DALL Proc. U.S. Nation. Mus. 54 p. 234.

†*Venericardia* with *V. cerrogordensis* var. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 108.—*V. collazica*, *rabelli*, *juncalensis* spp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 28–29.—*V. nuwokensis* sp. n. Pliocene, DALL U.S. Geol. Surv. Prof. ppr. 125–c p. 33.

#### ERYCINACEA.

*Scintilla symmetrica* sp. n. Madagascar, ODHNER Ark. Zool. 12 p. 9.

*Solecardia bryani*, *hawaiiensis*, *h. obsior*, *stigmatica*, *S.* (*Scintilla*) *thaanumi*, *S.* (*S.*) *chascax* spp. & subsp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 pp. 324–326.

#### CARDIACEA.

†*Cardiidae*, YOKOYAMA 566.

*Cardium thaanumi* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 323.—*C. edule*, WALTON 523 & 524.

†*Cardium* with *C. dickersoni*, *kirkeensis* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 140–141.—*C.* with *C.* (*Trigonocardia*) *sancti-sebastiani* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 34–36.—*C.* with *C.* (*Trachycardia*) *muricoides*, *cinderellae* var. *alternatum*, *C.* (*Trigonocardia*) *sambaicum* var. *portoricoensis*, *haitense* var. *areciboense* sp. & varr. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 pp. 114–117.—*C. thetironiae* sp. n. Jura E. Africa, LANGE Berlin Arch. Biontol. 3 p. 249.—*C.*, COUFFON 136.—*C.*, ROMAN & MAZERAN 433.

†*Conocardium missouriensis* sp. n. Carbon. U.S.A., Girty Miss. Bur. Geol. Mines 13 p. 253.

*Hippopus*, ANTHONY 18.

†*Protocardia*, ROMAN & MAZERAN 433.—*P.*, HENNIG 246.—*P.*, LANGE 319.

*Tridacna*, ANTHONY 18.

#### CHAMACEA.

†*Agria*, ROMAN & MAZERAN 433.

†*Chama* with *C. portoricana* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 109.

*Chamidae*, ODHNER 374.

†*Chamidae*, YOKOYAMA 566.

†*Echinochama*, MAURY 349.

†*Monopleura* with *M.* (*Petalodontia*) *bruni* sp. n. Cretaceous France, DOUVILLÉ Mem. Soc. géol. France 22 pp. 10–15.

†*Orbignya*, ROMAN & MAZERAN 433.

†*Plagiptychus*, ROMAN & MAZERAN 433.

*Pseudochama* gen. n. *P. pusilla* sp. n. Strait of Macassar, ODHNER Stockholm Vet.-Ak. Handl. 59 pp. 20 & 24.

†*Radiolites*, ROMAN & MAZERAN 433.

†*Requienia* with *R. gryphus* sp. n. Cretaceous France, DOUVILLÉ Mem. Soc. géol. France 22 pp. 8–9.—*R.*, DOUVILLÉ 170a.

†*Rudistes*, DOUVILLÉ 170b.

†*Vaccinites*, ROMAN & MAZERAN 433.

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- †*Anisocardia*, HENNIG 246.
- Anodonta*, HAAS 223.—A., BUCHNER 77.
- Anodontites jaliscoensis* sp. n. Mexico, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 p. 193.
- †*Antigona* with *A. tarquinia antillica* var. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 38-39.
- Arcidopsis footei*, PRASHAD 414.
- Azor*, GHOSH 208.
- †*Callocardia riocollazica* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 40.—*C. (Agriopoma) californica* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 p. 148.
- Calloconia*, LAMY 317.
- Ceratisolen*, GHOSH 208.
- †*Chione cryptolineata, lineolata, mediostriala* spp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 149-151.—*C.* with *C. quebradillensis* sp. n. *C. q. guajatica* var. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 pp. 40-41.—*C.*, HUBBARD 265.
- †*Clementia* with *C. rabelli* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 37.—*C.*, HUBBARD 265.
- Coralliophaga*, LAMY 317.
- Corbicula fluminalis*, PRASHAD 413.
- Culiellus*, GHOSH 208.
- †*Cyprina*, ROMAN & MAZERAN 433.
- Cyprina*, LAMY 317.
- †*Cyprina (Veneticardia) cossmanni* sp. n. Cretaceous France, ROMAN & MAZERAN L'Ann. Mus. hist. nat. 12 p. 102.—*C.*, LANGE 319.
- Cyprina*, HENDERSON 242.—*C.*, HENNIG 246.
- Cyrenoida guatemalensis* sp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 221.
- †*Cytherea (C.) berkei* sp. n. Tertiary Porto Rico, HUBBARD New York Acad. Sci. 3 p. 120.—*C. (Cytherea) berkei* sp. n. Tertiary Timor, TISBE Pal. Timor 8 p. 103.—*C. mulleri* sp. n. Jura E. Africa, LANGE Berlin Arch. Biont. 3 p. 254.
- †*Diplodontidae*, YOKOYAMA 566.
- Donax villatus* var. n. *aurea* France, DAUTZENBERG J. conchyliol. 65 p. 66.—*D. mediamericanus* sp. n. Guatemala, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 222.—*D. elegans, productus* spp. n. Madagascar, ODENER Ark. Zool. 12 pp. 10-28.—*D.*, PILSBRY 407.
- Dosinia discus*, CROZIER 143.
- Ensis*, GHOSH 208.
- Eupera yucatanensis minima* subsp. n. Mexico, PILSBRY Proc. Acad. Nat. Sci. Philad. 71 p. 222.
- Heteroglypta hawaii* sp. n. Hawaii, PILSBRY Proc. Acad. Nat. Sci. Philad. 1920 p. 380.
- Hyridella*, ORTMANN 387.
- †*Hyriopsis subchlegeli, altealata* spp. n. Pliocene Europe, HAAS Jahrb. Pruss. Geol. Landst. 60 pp. 148-150.
- Isocardia*, LAMY 317.
- †? *Isocardia*, LANGE 319.
- Isooropodon*, LAMY 317.
- Lamellidens marginalis* var. *cylinarina*, ANNANDALE & PRASHAD 12.—*L. jenkinsianus*, PRASHAD 414.
- Lasmigona viridis*, FRIEESON 190.
- †*Macrocallista ? incognita, weaveri* sp. n. Oligocene U.S.A., CLARK Univ. Cal. Pub. Bul. Dept. Geol. 11 pp. 145-147.
- Margaritana margaritifera*, KARKEI 295.—*M. m.*, SKIDLER 460.
- †*Mertrix*, ROMAN & MAZERAN 433.
- †*Mesopleura hubbardi* sp. n. Tertiary Porto Rico, MAURY New York Acad. Sci. 3 p. 44.
- Musculium*, LATCHFORD 320.—*M.*, WILLIGEN VAN DER 548.
- Nacella* n. gen. for *N. aquae-dulcis* n. sp. = *Solen fonesi*, ANNANDALE & KEMP nec DUNKER, GHOSH Rec. Ind. Mus. Calcutta 19 pp. 47-78.
- Nephronaias aztecorum tolimanensis* subsp. n. Mexico, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 p. 194.—*N. tempequensis* sp. n. Costa Rica, PILSBRY Proc. Acad. Nat. Sci. Philad. 72 p. 9.
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- Novaculina*, GHOSH 208.

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†*Psammosolen*, HUBBARD 265.—*P.*,  
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*Pseudanodonta rothomagensis*, and  
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†*Solen* with *S. gravidus* sp. n. Oli-  
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*maculosa*, *dissimilis*; *T. (P.) aureus*  
varr. n. *fulva*, *simipartita*, *simulans*;  
*T. (Amygdala)* *decussatus* var. n. *lutea*  
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*Mesodesmatidae*, LAMY 314a.

†*Mesodesmatidae*, YOKOYAMA 566.

†*Mya* (*Cryptomya*) *incognita* sp. n.  
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†*Panopea* [vide etiam *Panopaea*],  
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†*Saxicava aegyptio-indica* sp. n. Timor,  
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*reynei* sp. n. Dutch Guiana, BARTSCH  
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†*Anotomites* with *A. brocchiiformis*, *amanubanensis*, *edgari timorensis*, *mauritian timorensis*, *loriauxi*, *vorstmani*, *wichmanni*, *crasseplicatus timorensis* spp. n. Trias, WELTER Pal. Timor 1 pp. 69–83.

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†*Hamites*, ROMAN & MAZERAN 433.

†*Haploceras* with *H. (Hecticoceras) spira*, *H. priscum* spp. n. Jura East Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 45–50.

†*Harpoceras*, SAXL 446.—*H.*, SPENGLER 474.

†*Haselburgites* gen. n. with *H. admirandus* sp. n. Jura, BUCKMAN Type Amm. 24 p. 30.

†*Hecticoceras*, COUFFON 136.—*H.*, SPATH 470.

†*Hedenstroemia kaslinensis* sp. n. Permian, HANIEL Pal. Timor 3 p. 148.

†*Helicites malayicus* sp. n. Trias, WELTER Pal. Timor 1 p. 128.

*Hensenioteuthis*, JOUBIN 293.

*Heteroteuthis*, JOUBIN 293.

†*Hildoceras lantenoisi* sp. n. Lias, MANSUY Mem. Serv. geol. Indochine 3 p. 38.—*H.*, SAXL 446.

†*Hibolites*, COUFFON 136.

†*Holcodiscus faku*, *africanus* spp. n. Cretaceous Pondoland, VAN HOEPEN Ann. Transv. Mus. 7 pp. 144–146.—*H.* with *H. subquadratus* sp. n. Jura East Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 70–72.

†*Holcostephanus crassus* sp. n. Jura East Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 p. 58.

†*Hyattoceras subgeinitzi* sp. n. Permian, HANIEL Pal. Timor 3 p. 112.

†*Hypocladiscites subaratus compressus*, *s. planatus*, *subcarinatus timorensis* spp. n. Trias, WELTER Pal. Timor 1 pp. 175–177.

*Idiosepius*, SASAKI 444.

*Illex*, JOUBIN 293.

†*Indonesites* gen. n. with *I. dieneri* sp. n. Trias, WELTER Pal. Timor 1 p. 103.

†*Isculites crasseplicatus* sp. n. Trias, WELTER Pal. Timor 1 p. 53.—*I. ladinus*, *bikatiensis* spp. n. Trias, WELTER Pal. Timor 5 pp. 80–81.

†*Japonites* with *J. meridianus*, *subacutus* spp. n. Trias, WELTER Pal. Timor 5 pp. 122–127.

†*Jovites* with *J. daciformis timorensis* sp. n. Trias, WELTER Pal. Timor. 1 pp. 47–48.

†*Juvavionautilus geyeri* sp. n. Trias, DIENER Wien Denk. Ak. Wiss. 96 p. 776.

†*Juvavites* with *J. verbeeki*, *ehrichi timorensis*, *subinterruptus crasseplicatus*, *nepotis timorensis*, *idenburgi*, *brouweri*, *oyensi*, *decheni timorensis*, *molengraaffi*, *tobleri*, *gonionotitiformis*, *J. (Dimorphites ?) weberi*, *fissicostatus timorensis*, *f. interruptus* spp. n. Trias, WELTER Pal. Timor 1 pp. 54–68.

†*Kepplerites*, COUFFON 136.

†*Keyserlingites angustecostatus* sp. n. Trias, WELTER Pal. Timor 5 p. 108.

†*Korythoceras* gen. n. with *K. korys* sp. n. Jura, BUCKMAN Type Amm. 22 p. 17.

†*Lamberticeras* gen. n., BUCKMAN Type Amm. 21 p. 14.

*Leachia*, JOUBIN 293.

†*Leonicer*, ROMAN & MAZERAN 433.

†*Leptospinctus leptus*, *cleistus* spp. n. Jura, BUCKMAN Type Amm. 22 pls. clx clxi.

†*Lioceras*, KLÄHN 307.

*Liocranchia*, SASAKI 444.

†*Lissoceras*, COUFFON 136.

*Loligo breekeri*, OKUDA 377.—*L. b.*, OKUDA (and others) 379.—*L. vulgaris*, WINCKWORTH 580.—*L.*, SASAKI 444.

†*Lytoceras* with *L. hennigi* sp. n. Jura East Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 40–44.—*L.*, OPPENHEIMER 385.

†*Macrocephalites*, COUFFON 136.

†*Macroscaphites*, ROMAN & MAZERAN 433.

†*Malayites* gen. n. with *M. informis*, *singularis*, *geniculatus*, *g. elegans*, *crasseplicatus*, *indomalayicus*, *sundaicus* spp. n. Trias, WELTER Pal. Timor 1 pp. 83–89.

†*Masckeites densus* sp. n. Jura. BUCKMAN Type Amm. 21 pl. clii.

*Mastigoteuthis*, JOUBIN 293.—*M.*, SASAKI 444.

†*Medlicottia* with *M. artiensis* var. *timorensis*, *subprimas* var. & sp. n. Permian, HANIEL Pal. Timor 3 pp. 41–47.

*Megalocranchia*, SASAKI 444.

†*Megaphyllites evolutus* sp. n. Trias, WELTER Pal. Timor 5 p. 114.

*Melanoteuthis*, JOUBIN 293.

†*Metacarnites dieneri* sp. n. Trias, WELTER Pal. Timor 1 p. 157.

†*Miltites* with *M. malayicus* sp. n. Trias, WELTER Pal. Timor 1 pp. 126–127.

†*Molengraaffites* gen. n. with *M. crassus*, *carinatus*, *compressus* spp. n. Trias, WELTER Pal. Timor 1 pp. 100–103.

†*Monophyllites* with *M. arthaberi*, *pseudo-pradyumna* spp. n. Trias, WELTER Pal. Timor 5 pp. 115–117

†*Morrisiceras sphaera* sp. n. Jura, BUCKMAN Type Amm. 22 pl. clxvii

*Moschites*, WÜLKER 563.

†*Nautiloidea*, HIND 253.

*Nautilus pompilius*, RIDDLE 424a.

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†*Nautilus* with *N. (Aganides) bitauniensis*, *N. molengraaffi*, *wanneri* spp. n. Permian, HANIEL Pal. Timor 3 pp. 132–139.—*N.* with *N. plicatus*, *dietrichei*, *expletus*, *latifrons* spp. n. Jura East Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 23–30.—*N.* with *N. hallstattensis* sp. n. Lias Austria, SPENGLER Jahrb. Geol. Reichsanst. 68 p. 468.—*N.*, COUFFON 136.—*N.*, ROMAN & MAZERAN 433.

†*Neotibetites weteringi timorensis* sp. n. Trias, WELTER Pal. Timor 1 p. 156.

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*Octopus macropus*, BOTTAZZI 68.—*O.*, JOUBIN 293.

†*Ecptychius*, COUFFON 136.

†*Ecptychoceras* gen. n., BUCKMAN Type Amm. 23 p. 24.

†*Ekotraustes*, COUFFON 136.

*Ommastrephes sagittatus*, RITCHIE 425.—*O.*, JOUBIN 293.—*O.*, SASAKI 444.

*Onychoteuthys robusta*, BACCIALON 26.—*O.*, JOUBIN 293.

*Opistoteuthis*, SASAKI 444.

†*Oppelia*, COUFFON 136.

†*Orthoceras* with *O. rotundulum*, *mojsisovici* var. *sulcata*, *indo-australicum*, *pulchristriatum* spp. & var. n. Trias, BÜLOW Pal. Timor 4 pp. 6–16.—*O.* with *O. verbeeki*, *bitauniense*, *welteri*, *maubesiense* spp. n. Permian, HANIEL Pal. Timor 3 pp. 140–145.—*O.*, FERRONNIÈRE 186.

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†*Oyyclymenia ornata* var. *sudetica*, *striata* var. *silesiaca* varr. n. Devon Germany, RENZ Breslau Jahreshb. Ges. v. Cult. 91 p. 18.

†*Pachydiscus* with *P. rhodanicus* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp 14-18.

†*Papanoceras*, *indoaustralicum*, (*Stacheoceras*) *timorense* spp. n. Permian, HANIEL Pal. Timor 3 pp. 88-106.

†*Papilliceras papillatum* sp. n. Jura, BUCKMAN Type Amm. 21 pl. cl. a. b.

†*Parahoplites*, OPPENHEIMER 385.

†*Paralegoceras sundaicum* with forms *involuta* and *evoluta* *P. pseudomeneghinii* spp. & *formae* n. Permian, HANIEL Pal. Timor 3 pp. 58-65.

†*Paranautilus meridianus sundaicus* sp. n. Trias, WELTER Pal. Timor 1 pp. 205-206.

†*Parapopanoceras dyadicum* sp. n. Permian, HANIEL Pal. Timor 3 p. 106.

†*Parapronites konincki* var. n. *timorensis* Permian, HANIEL Pal. Timor 3 p. 29.

†*Pararcestes zitteli timorensis*, *sublobatus timorensis* spp. n. Trias, WELTER Pal. Timor 1 p. 191.

†*Parasageceras* gen. n. with *P. discoidale* sp. n. Trias, WELTER Pal. Timor 5 p. 113.

†*Paratibetites* with *P. insularis*, *meridianus*, *tornquisti timorensis*, *augustosellatus posterior* spp. n. Trias, WELTER Pal. Timor 1 pp. 148-155.

†*Parkinsonidae* fam. n., BUCKMAN Type Amm. 24 p. 28.

†*Paroxynoticeras* with *P. undulatum*, *subundulatum*, *tripartitum* spp. n., PIA Wien Abh. Geol. Reichsanst. 23 pp. 18-23.

†*Patoceras*, COUFFON 136.

†*Pavloviceras* gen. n. with *P. bathyomphalum*, *stibarum*, *roberti* spp. n. Jura, BUCKMAN Type Amm. 22 & 23 pp. 18 & 19.

†*Pendobigotella otiophora* sp. n. Jura, BUCKMAN Type Amm. 24 pl. exci.

†*Perisphinctes* with *P. staffi*, *latisinus* spp. n. Jura E. Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 60-65. —P., COUFFON 136.

†*Phragmoceras proboscideum*, *prominens*, *p. var. minus*, *dentatum*, *obesum*, *farcimen*, *dubium*, *praecurvum*, *transversale*, *undulatum*, *gradatum*, *acuminatum*, *retortum*, *brevidomicilium*, *lilje-*

*valli*, *parvulum*, *discoideum*, *gigas*, *simile*, *sigmoideum*, *inflexum*, *lamellosum*, *costatum*, *mobergi*, *limbatum*, *eurystoma*, *munthei*, *fasciatum*, *convolutum*, *ellipticum*, *incertum*, spp. & var. n. Upper Silurian Sweden, HEDSTRÖM Stockholm Geol. Unders 15 pp. 8-31.

†*Phylloceras* with *P. krenkeli*, *deplanatum*, Jura; *P. eris* Cretaceous spp. n. E. Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 31-39. —*P. umzambiense* sp. n. Cretaceous Pondoland, VAN HOEPEN Ann. Transv. Mus. 7 p. 142. —*P. grothi*, *lytoceroide* spp. [? n.] Cretaceous Majorca, FALLOT Trab. Mus. Nac. Ci. Nat. Madrid 26 pp. 20-28. —P., COUFFON 136. —P., SAXL 446. —P., SPATH 471.

†*Pinacoceras schneideri* sp. n. Trias, WELTER Pal. Timor 5 p. 92.

†*Placites meridianus* sp. n. Trias, WELTER Pal. Timor 1 p. 197.

†*Platyclymeniidae* with *Platyclymenia rotundata*, *richteri*, *bicostata*, *walcotti*, *curvicosta*, *barrandei*, *mirabilis*, *quenstedti*, *ruedemanni*; and *Laevigites* gen. n. with *L. hoervalensis*; *Oxyclymenia subundulata* and var. *elegantula*, *O. galeata*, *wocklumeri*, *lamellosa* spp. & var. n. Devon Germany, WEDEKIND Göttingen Abh. Ges. Wiss. 10 pp. 28-54.

†*Pleuronautilus* (*Enoploceras* ?) *malayicus* sp. n. Trias, WELTER Pal. Timor 1 p. 229. —*P. dyadicus* sp. n. Permian, HANIEL Pal. Timor 3 p. 128. —P. with *P. (Enoploceras) Lepsiusiformis*, *ausseanus* spp. n. Trias, DIENER Wien Denk. Ak. Wiss. 96 pp. 756-759.

†*Poculispinctes auricularis* sp. n. Jura, BUCKMAN Type Amm. 24 pl. clxxxvi.

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†*Praeglyphioceras*, RENZ 421.

†*Prionoceras prionodes* sp. n. Jura, BUCKMAN Type Amm. 21 pl. clv.

†*Prionodoceras* gen. n., BUCKMAN Type Amm. 22 p. 17.



†*Prionotropis*, ROMAN & MAZERAN 433.

†*Proarcestes* with *P. hanieli* sp. n. Trias, WELTER Pal. Timor 1 pp. 180–181.

†*Proclydonautilus* with *P. discoidalis*, *singularis*, *inflatus*, *gasteroptychus timorensis* spp. n. Trias, WELTER Pal. Timor 1 pp. 206–214.—*P. tuvalicus*, *ernesti*, *ermollii* spp. n. Trias, DIENER Wien Denk. Ak. Wiss. 96 pp. 771–774.

†*Pronorites uralensis* var. n. *timorensis* Permian, HANIEL Pal. Timor 3 p. 25.

†*Propinacoceras simile*, *insulcatum*, *transitorium* spp. n. Permian, HANIEL Pal. Timor 3 pp. 34–41.

†*Protetragonites*, SPATH 471.

†*Protowarthia hispanica* sp. n. Silurian Spain, BORN Abh. Senckenb. Ges. 36 p. 343.

†*Pterotoceras* gen. n. with *P. arthaberi* sp. n. Trias, WELTER Pal. Timor 5 p. 83.

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†*Ptychites amarassicus* sp. n. Trias, WELTER Pal. Timor 5 p. 128

†*Puzosia kiliani* and var. *inornata* sp. & var. [? n.] Cretaceous Majorca, FALLOT Trab. Mus. Nac. Ci. Nat. Madrid 26 p. 48.—*P.* with *P. stremmi* sp. n. Cretaceous East Africa, ZWIERZYCKI Berlin Arch. Biontol. 3 pp. 67–69.—*P.* with *P. gaudemaris* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 19–22.

*Pyrgopsis lemur* sp. n. W. Atlantic, BERRY U.S. Nation. Mus. Proc. 58 p. 298.

†*Quenstedticeras*, COUFFON 136.

†*Reineckia*, COUFFON 136.

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*Rossia* with *R. mollicella*, *bipapillata* spp. n. N.W. Pacific, SASAKI U.S. Nation. Mus. Proc. 57 pp. 188–190.—*R.*, JOUBIN 293.

†*Sagenites malayicus* sp. n. Trias, WELTER Pal. Timor 1 p. 107.

†*Sagitticeras* gen. n. with *S. sagitta*, *fastigatum* spp. n. Jura, BUCKMAN Type Amm. 23 pp. 19–20.

*Sandalops pathopsis*, *ecthambus* spp. n. W. Atlantic, BERRY U.S. Nation. Mus. Proc. 58 p. 297.

*Scaevurgus*, SASAKI 444.

†*Scaphites* with *S. aequalis* Sow. mut. n. *tyronensis*; *S. planus* sp. n. Cretaceous France, ROMAN & MAZERAN Lyon Arch. Mus. hist. nat. 12 pp. 12–13.—*S.*, NOWAK 372.

†*Schumardites keideli* sp. n. Upper Carbon. China, LEUCHS München Sitzb. Bay. Ak. 1919 p. 222.

†*Seguenziceras*, SAXL 446.

*Sepia* with *S. carinata*, *Kobiensis* var. *albatrossi* var. & sp. n. N.W. Pacific, SASAKI U.S. Nation. Mus. Proc. 57 pp. 191–195.—*S. officinalis*, GALIANO 196 & 197.—*S.*, JOUBIN 293.—*S.*, WÜLKER 563 & 564.

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†*Sibirites militiformis*, *meridianus* spp. n. Trias, WELTER Pal. Timor 1 pp. 124–125.

†*Silesites seranonis* var. [? n.] *balearensis* Cretaceous Majorca, FALLOT Trab. Mus. Nac. Ci. Nat. Madrid 26 p. 55.

†*Sirenites* with *S. malayicus* sp. n. Trias, WELTER Pal. Timor 1 pp. 164–166.

†*Sowerbyceras*, SPATH 471.

†*Sphaeroceras*, COUFFON 136.

†*Sphaeroceratidae* fam. n., BUCKMAN Type Amm. 23 p. 22.

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†*Steinmannites multinodosus*, *irregularis*, *hoenesi timorensis* spp. n. Trias, WELTER Pal. Timor 1 pp. 140–142.

†*Stenarcestes malayicus* sp. n. Trias, WELTER Pal. Timor 1 p. 193.

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†*Stepheoceras*, COUFFON 136.

*Stigmatoteuthis*, JOUBIN 293.—S., SASAKI 444.

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†*Sturia malayica* sp. n. Trias, WELTER Pal. Timor 1 p. 198.

†*Styrites* with *S. malayicus* sp. n. Trias, WELTER Pal. Timor 1 pp. 122–123.

†*Sundaites* gen. n. with *S. levis* sp. n. Permian, HANIEL Pal. Timor 3 pp. 31–34.

†*Sutneria*, BATALLER 44.

†*Syringoceras externecavatum* sp. n. Trias, WELTER Pal. Timor 5 p. 131.—*S. zetteli timorense, malayicum* spp. n. Trias, WELTER Pal. Timor 1 pp. 223–224.

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†*Tetragomites teres* sp. n. Cretaceous Pondoland, VAN HOEPEN Ann. Transv. Mus. 7 p. 144.

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†*Thisbites rassikori* sp. n. Trias, WELTER Pal. Timor 1 p. 130.

†*Timorites* gen. n. with *T. curvicos-tatus, striatus* spp. n. Permian, HANIEL Pal. Timor 3 pp. 108–111.

*Todaropsis*, JOUBIN 293.—*T.*, WINCK-WORTH 551.

†*Tornoceras* with *T. auriforme* sp. n. Devon, OPPENHEIMER Brünn Verh. Natf. Ver. 54 p. 174.

*Tracheloteuthis*, JOUBIN 293.

†*Trachyceras* with *T. crassum* sp. n. Trias, WELTER Pal. Timor 5 p. 87.

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*Tremoctopus*, JOUBIN 293.—*T.*, WÜLKER 563.

†*Tropites* with *T. acutangulus timor-ensis, malayicus, dubiosus* spp. n. Trias, WELTER Pal. Timor. 1 pp. 110–117.

†*Turrilites*, ROMAN & MAZERAN 433.

†*Tutchericeras perfoliatum* sp. n. Deiran, BUCKMAN Type Amm. 21 pl. cxxxviii.

†*Uhligella boussaci, bretoni* spp. [? n.] Cretaceous Majorca, FALLOT Trab. Mus. Nac. Ci. Nat. Madrid 26 p. 38.

†*Vermisphinctes subdivisus vermi-formis* sp. n. Jura, BUCKMAN Type Amm. 22 & 24 pls. cxc & clxii.

†*Vertebriceras* gen. n. with *V. dorsale, rachis* spp. n. Jura, BUCKMAN Type Amm. 21 p. 16.

†*Waagenoceras gemmellaroi* sp. n. Per-mian, HANIEL Pal. Timor 3 p. 120

†*Waldhausenites* gen. n. with *W. malayicus* sp. n. Trias, WELTER Pal. Timor 1 p. 167.

†*Watasella* with *W. nigra* gen. & sp. n. N.W. Pacific, SASAKI U.S. Nation. Mus. Proc. 57 p. 168.

*Watasellidae* fam. n., SASAKI U.S. Nation. Mus. Proc. 57 p. 168.

*Watasenia*, SASAKI 444.

†*Weissermeliceras* gen. n. with *W. longilobatum* sp. n. Jura, BUCKMAN Type Amm. 23 p. 20.

†*Witchellia spinifera* sp. n. Jura, BUCKMAN Type Amm. 23 pl. clxviii.

†*Xenaspis indo-austratica, laevis* spp. n. Trias, WELTER Pal. Timor. 5 p. 129.

†*Xenodiscus rotundus* sp. n. Permian, HANIEL Pal. Timor 3 p. 123.

†*Zigzagiceratidae* fam. n., BUCKMAN Type Amm. 24 p. 30.

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†*Grosseletina australis* var. n. *alta, G. mackayi, scotti* spp. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 pp. 357–358.

†*Kochia striata* sp. n. Carbon. N.S. Wales, BENSON, DUN & BROWNE Proc. Linn. Soc. N.S.W. 45 p. 353.

†*Loganiopharynx* gen. n., WENZ Frankfurt a. M. Senckenbergiana 1 p. 69.

†*Oostrombus*, SAVORNIN 445.

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## IX. ARTHROPODA

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As experience shows that the adoption of "Arthropoda" and "Vertebrata" as separate sections gives rise to an useless repetition of titles without any corresponding advantage, it has been decided that these two divisions may be dispensed with in future in the Zoological Record.

[EDITOR.]



# X. CRUSTACEA

ARRANGED BY

STEPHEN K. MONTGOMERY, B.A., B.Sc.

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*Pseudoprotella inermis* sp. n. G. of Cadiz p. 11, CHEVREUX Bull. Mus. Paris 1920.

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†*Aristozoë porcula* sp. n. Devonian Aurburg, Rhine p. 151 text-fig., RICHTER Wiesbaden Jahrb. Ver. Natk. 70.

†*Caryocaris silicula* sp. n. Ordovician Maryland p. 372 pl. lii, BASSLER Maryland geol. surv. Cambrian Ordovic. 1919.

†*Nahacaris* gen. n. near *Rhinocaris*, *sturtzi* sp. n. Devonian, Bavaria, p. 290 text-fig., JAEKEL Berlin Zs. D. geol. Ges. 72.

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†*Estheria* sp. p. 78 pl. ii, LERICHE Rev. Zool. Afr. 8.

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*Lepidurus apus*, synn., p. 54 figs., LUNDBLAD Ark. Zool. 13 No. 16.

†*Limnethesia* gen. n. near *Estheria*, p. 196 *ardra* sp. n. Carboniferous, Kilkenny p. 197 pls. xiv-xv, WRIGHT Proc. R. Irish Acad. 35.

†*Ribeiria* ? *nuculitiformis* p. 362 pl. xxxi, BASSLER, Maryland geol. surv. Cambrian Ordovic. 1919.

*Streptocephalus auritus* p. 281 pl. ii text-figs., OSTERWALD & SCHWAN Zool. Jahrb. Jena, 42.

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†*Bythocypris cylindrica* p. 371 pls. lii, lv, BASSLER Maryland geol. surv. Cambrian Ordovic. 1919.—†*B. brownei* p. 66 pl. xii, KLÄHN Colmar Mitt. nathist. Ges. Neue folge 14.

*Candonia breuilli* sp. n. Spain, p. 477 pl. xviii, PARIS Arch. zool. Paris 58.

*Candonocypris ferdinandi* sp. n. Macedonia p. 37 text-figs., LINDNER Zool. Anz. 52.

†*Ceratopsis chambersi* p. 369 pl. lv, BASSLER Maryland geol. surv. Cambrian Ordovic. 1919.

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†*Cytheridea mülleri* var. *torosa* p. 74 pl. xiii, *papillosa* p. 75 pl. xiii, *solida* p. 77 pl. xiii, *fissodentata* p. 78 pl. xiii, KLÄHN t.c.

†*Cytherideis abscissa* p. 78 pl. xiv, KLÄHN t.c.

†*Cytherina* ? *recta* p. 210, *Otinangensis* sp. n. miocene Ottnang, Austria, p. 210 text-figs., TOULA Wien Verh. geol. rchsanst. 1914.

†*Cytherura sarsii* p. 82 pl. xiv, KLÄHN Colmar Mitt. nathist. Ges. neue folge 14.

*Darwinula zimmeri* sp. n. East Africa p. 487 text-figs., MENZEL Arch. hydrobiol. 11.

*Doloria* subgen. n. of *Cypridina* q.v. SKOGSBERG

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†*Isophilina gregaria* p. 363 pl. xxxvi, *seelyi* p. 363 pl. xxxv, BASSLER Maryland geol. surv. Cambrian Ordovic. 1919.

†*Leperditia fabulites* p. 364 pls. xxxix, xliii, BASSLER t.c.

†*Leperditella tumida* p. 366 pl. xliii, BASSLER t.c.

†*Macronotella ulrichi* p. 368 pl. xliii, BASSLER t.c.

*Macrocypridina* subgen. n. of *Cypridina* q.v. SKOGSBERG

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✗ *Siphonostra* subgen. n. of *Cypridina* q.v. *Skogsberg*.

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*Stenocypris junodi* sp. n. Lorenzo Marques p. 145 pl. vii, DELACHAUX Lisbon Bull. soc. Port. sc. nat. 8.

†*Ulrichia biverrea* p. 370 pl. lv, BASSLER Maryland geol. surv. Cambrian Ordov. 1919.

✓ *Vargula* subgen. n. of *Cypridina* q.v. *Skogsberg*.

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CALMAN 29.—CHILTON 47.—PÉREZ 147.—VANHÖFFEN 195.

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# XI. ARACHNIDA

TO WHICH ARE ADDED

GIGANTOSTRACA (XIPHOSURA, TRILOBITA, EURYPTERIDA),  
PANTOPODA, TARDIGRADA, PENTASTOMIDA, MYRIOPODA  
and PROTOTRACHEATA

ARRANGED BY

STEPHEN K. MONTGOMERY, B.A., B.Sc.

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(INCL. TARDIGRADA &amp; PENTASTOMIDA)

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# XII. INSECTA

BY

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1789; Timberlake, *Pachyneuron*, P. hawai. ent. Soc. 4 p. 330.—*Lepidoptera*, Swezey, 1756, 1757.—*Homoptera*, Crawford, 441.—*Psocoptera*, Enderlein, 602.—*Isoptera*, Oshima, 1364.

Galapagos islds., *Coleoptera*, Horn, 911.—*Orthoptera*, Hebard, 834.

### Palaearctic Region.

#### (a) Collectively.

##### *Coleoptera*.

Bernhauer, 183, 191; Breit, 263, 264, 268; Gridelli, 783; Heikertinger, 842; Kolbe, 1037; Netolitzky, 1306; Obenberger, 1329, 1333, 1334; Pic, 1430; Rambousek, 1476; Reitter, 1503, 1505, 1506, 1507, 1508, 1510, 1514, 1515, 1516; Roubal, 1563, 1564, 1566, 1569; Wagner, 1849.

##### *Hymenoptera*.

Enslin, 611; Friese, 694, 699, 700, 701; Habermehl, 797, 798, 799; Kohl, 1036; Pic, 1428; Trautmann, 1799.

##### *Diptera*.

Duda, 537; Edwards, 586; Engel, 607; Kieffer, 1007; Kröber, 1048; de Meijere, 1215; Villeneuve, 1838, 1839.

#### (b) Europe, collectively.

##### *Coleoptera*.

Benick, 164, 165; Breit, 266; Müller, 1279, 1281; Netolitzky, 1303; Rambousek, 1474; Reitter, 1509; Ross, introduced species, 1553; Roubal, 1567.

##### *Hymenoptera*.

Blüthgen, 239; Bondroit, 242; Kryger, 1050; Ruschka, 1578.

##### *Diptera*.

Curran, England & France, *Syrphidae*, Canad. Ent. 52 pp. 35–37; Duda, 536; Kuntze, 1058; Martini, 1209; Schmitz, 1611.

##### *Orthoptera*.

Ramme, 1477.

#### (c) North Europe and Siberia.

##### *Coleoptera*.

Aurivillius, 97; Jansson, Sweden, 956; †Mjöberg, 1248.

##### *Hymenoptera*.

Cushman & Rohwer, Finland, 461; Malaise, Sweden, 1180; Schneider, Norway, 1614a.

##### *Lepidoptera*.

Rosa, *Rhop.*, 1552; Bryk, Swedish Lapland, 293; Nordström, Sweden, 1318; Orstadius, Sweden, 1358; Prout, E. Siberia, 1460; Vretling, Sweden, 1847.

##### *Diptera*.

Edwards, Siberia, 583; Fraser, 683; Ludlow, 1147; Ringdahl, Scandinavia, 1534.

##### *Heteroptera*.

Sahlberg, Finland, 1587.

##### *Thysanoptera*.

Ahlberg, 18.

##### *Plecoptera*.

Esben-Petersen, Swed. Lapland, 613.

#### (d) British Islands.

##### THE FAUNA AS A WHOLE.

##### *Insecta*.

†Cockerell, 384; †Lesne, 1114; Scott, early appearance, p. 64 & p. 65 Ent. Mag. 56.

##### *Coleoptera*.

Blair, *Abax parallelus*, 224; †Cockerell, 385, †386; *Epuraea bickhardi*, novelty, Donisthorpe p. 167 Ent. Rec. 32; *Cryptobium fracticorne* var. *jacquelinei*, Harwood p. 231 Ent. Mag. 56; Sharp, 1673; *Laemotmetus* in Cheshire, Tomlin p. 46 Ent. Mag. 56; Keys, 1005; Munro, *Hylastes attenuatus*; Ent. Mag. 56 p. 257; Newbery, *Medon obscurellus*, 1307; *Tychius haematopus* queried, Newbery p. 130 Ent. Mag. 56, Edwards t.c. p. 163.

*Myelophilus minor*; Laing p. 258 Ent. Mag. 56.

##### *Hymenoptera*.

Crawley, 443; †Donisthorpe, 523; Girault, 754; Johnson, novelties, 975; Lyle, 1153, 1154; Morice, 1255, 1257; Perkins, *Psammocharidae*, 1403; Waterston, 1873.

*Lepidoptera*.

Durrant, 547, 548; Whittle, *Ancylis tineana*, 1901; Woodforde, 1920; *Cateremna terebrella*, Durrant p. 258 Ent. Mag. 56.

*Trichoptera*.

Mosely, 1264.

*Neuroptera*.

Lucas, 1139.

*Diptera*.

Bagnall, 116; Collin, 409, 410; Edwards, 579, 582, 588, 589; Harrison, 819; Lang, 1088.

*Hemiptera*.

Butler, *Plagiognathus*, Ent. Mag. 56 p. 92; Donisthorpe, 524; Edwards, 591; Green, 778; Harrison, 818; Laing, 1079, 1080.

*Thysanoptera*.

Bagnall, 119.

*Orthoptera*.

Lucas, 1142, 1143.

## LOCAL LISTS.

*Insecta*.

New Forest, Jones Ent. 53 pp. 5-10.

London, Paskell p. 212 Ent. 53.

Putney, Donisthorpe pp. 37, 38 Ent. Rec. 32.

Cheshire, Morris, 1259.

Wensleydale, galls, Falconer pp. 29 & 30 Naturalist 45; Yorkshire, Morley and others, Naturalist 45 pp. 42 & 43; Scarborough, galls, Brown pp. 73 & 74 Naturalist 45; East Yorkshire, Fordham Naturalist 45 pp. 141 & 142; Yorkshire, Fordham and others p. 260 Naturalist 45; Swaledale, Galls, Falconer pp. 360 & 361 Naturalist 45.

Cumberland, *Neuroptera* and *Trichoptera*, Day p. 92 Ent. Mag. 56.

Highlands Col. and *Heteropt.*, Pickard-Cambridge Ent. Mag. 56 p. 45.

South Uist, Grimshaw, 787.

*Coleoptera*.

Scilly islds., Blair p. 13 Ent. Mag. 56.

South Devon, Keys, 1006; Plymouth, Keys p. 258 Ent. Mag. 56.

Studland, *Emus hirtus*, Lucas p. 286 Ent. 53.

Isle of Wight, Bedwell p. 111 Ent. Mag. 56; Isle of Wight, *Hetaerius*, Stott p. 136 Ent. Mag. 56.

Sussex, Tottenham pp. 228-231 Ent. Mag. 56; Chichester, *Rosalia alpina*, Anderson Ent. Rec. 32 p. 208.

Herefordshire, *Cryptohypnus*, Perrins p. 45 Ent. Mag. 56.

Bristol, *Platyrhinus*, Donisthorpe, 527.

Surrey, *Cryphalus fagi*; Munro p. 257 Ent. Mag. 56.

Tunbridge Wells, Gripper p. 62 Ent. Mag. 56.

Tubney, Walker p. 209 Ent. Mag. 56.

Oxford, Walker, 1853; Oxford, Walker p. 14 Ent. Mag. 56; Oxford, Walker p. 109 Ent. Mag. 56.

Reading, Fowler p. 91 Ent. Mag. 56.

Barton Mills, Donisthorpe Ent. Rec. 32 p. 153; Freckenham and Barton Mills, Donisthorpe Ent. Rec. 32 pp. 199 & 200.

Scarborough, Walsh p. 271 Naturalist 45; Yorkshire, Fordham, 674; Yorkshire, Naturalist 45 p. 407; Yorkshire, *Polydrusus flavipes*, Fordham p. 90 Ent. Mag. 56, and Bayford t.c. p. 110.

Cumberland, *Polydrusus flavipes*, Day p. 46 Ent. Mag. 56.

Scotland, *Orochares angustatus*, Black p. 14 Ent. Mag. 56.

Dumbarton *Halysia 16-guttata*, Evans p. 14 Scott. Nat. 1920.

Renfrewshire, Fergusson p. 94 Scott. Nat. 1920.

Clyde, *Antherophagus*, Fergusson p. 58 Scott. Nat. 1920; Clyde, Fergusson, *Henichus exilis*, p. 94 Scott. Nat. 1920; Clyde, the record of *Pityogenes chalcographus*, Fergusson p. 199 Scott. Nat. 1920.

Stirling, *Balaninus villosus*, Fergusson p. 58 Scott. Nat. 1920.

Argyll, *Cetonia aurata*, Brown p. 53 Scott. Nat. 1920.

Rannock, Black p. 91 Ent. Mag. 56.

Ireland, Janson, 955.

Nicholson p. 34 Irish Nat. 29; *Harpalus 4-punctatus* var. *montivagus*, Janson p. 14 Ent. Mag. 56.

Kerry, Bonaparte-Wyse, 241.

#### *Hymenoptera*.

Lichfield, *Misetus oculatus*, Morley p. 66 Ent. Mag. 56.

Yorkshire, Bradley p. 111 Ent. Mag. 56; Fordham p. 181 Naturalist 45.

Tyne, Morice, 1256.

East Lothian, Evans, *Rhyssa*, Scott. Nat. 1920 p. 167.

Rannock, *Bombus and Vespa*, Sheldon p. 43 Ent. 53.

Ireland, Johnson, 976, 978; Ireland, *Rhyssa*, Halbert p. 25 Irish Nat. 29.

#### *Lepidoptera*.

Cornwall, Oliver p. 279 Ent. 53; Cornwall, *D. livornica*, Hopper p. 235 Ent. 53.

South Devon, *Perizoma taeniata*, Woodforde p. 21 Ent. 53; Plymouth, Moore p. 285 Ent. 53.

South Hants and Devon, Burras Ent. 53 pp. 33-37.

Devonshire, *D. livornica*, Moore p. 190 Ent. 53; Devonshire, *L. vitellina*, Moore p. 236 Ent. 53.

Teignmouth, *Stauropus*, Bowater p. 188 Ent. 53.

Isle of Wight, *A. caliginosa*, Godfrey p. 20 Ent. 53.

Bournemouth, *D. livornica*, Newman p. 190 Ent. 53.

Portsmouth, *Z. hippocrepidis*, Postans p. 212 Ent. 53; Portsmouth, Postans p. 236 Ent. 53.

Dover, *P. livornica*, Abbott p. 285 Ent. 53.

Brighton, *P. livornica*, Bramwell p. 285 Ent. 53.

Eastbourne, Adkin Ent. 53 pp. 78-80.

Kent & Sussex, *Melitaea*, Crisp Ent. 53 p. 18.

East Sussex, Jacobs p. 211 Ent. 53.

Kent, *D. livornica*, Sutton p. 190 Ent. 53.

Thanet, Hayward p. 236 Ent. 53.

Sheppey, Rhop., Betts p. 67 Ent. 53.

Sevenoaks, Gillett p. 119 Ent. 53; Sevenoaks, Gillett p. 23 Ent. 53.

Surrey, *Strymon pruni*, Talbot p. 40 Ent. Rec. 32.

Witley, Tullett, 1801.

Byfleet, *L. sibylla*, Campion p. 1209 Ent. 53.

Somerset, *Stigmella fletcheri*, Sich p. 97 Ent. Rec. 32.

Bath, *D. livornica*, Coney p. 210 Ent. 53.

London, St. Aubyn & Crabbe p. 234 Ent. 53.

Wimbledon, *L. sibylla*, Couchman p. 209 Ent. 53.

Dartford, *C. frazini*, Jaques p. 210 Ent. 53.

Reading, Fowler p. 63 Ent. Mag. 56.

Oxford, Walker p. 231 Ent. Mag. 56.

Essex, Wainwright p. 21 Ent. 53.

Dovercourt, Mathew p. 159 Ent. 53.

Wanstead, *P. c—album*, Paskell p. 235 Ent. 53.

Cambridge, *Xylina lambda*, Campbell p. 279 Ent. 53.

Bishop's Stortford, *Thamnoma brunneata*, Mellows p. 236 Ent. 53.

Princes Risborough, Pierce p. 188 Ent. 53.

Monks Wood, Mace p. 136 Ent. 53.

Chilterns, *Zygaena*, Rowland-Brown p. 186 Ent. 53.

Wicken, *Thamnodroma brunneata*, Wickham p. 210 & 211 Ent. 53.

Staffordshire, *Thamnodroma brunneata*, Reid p. 188 Ent. 53.

Staffordshire, Woodforde Ent. 53 pp. 54-56.

Chilwell, Notts., *Polygonia*, Pearson p. 191 Ent. Rec. 32.

Norfolk, etc., Gurney Ent. 53 pp. 37-40; Norfolk, *Thamnionoma brunneata*, Edelsten p. 263 Ent. 53; Norfolk, *C. celerio*, Imms p. 285 Ent. 53.

Yorkshire *Nonagria arundinata*, Porritt p. 232 Ent. Mag. 56.

Doncaster, *Oxyptilus teucris*, Corbett p. 211 Ent. Mag. 56.

Huddersfield, *Exapate congelatella* Porritt p. 47 Ent. Mag. 56.—Huddersfield, Porritt p. 64 T.c.

Scarborough, Walsh p. 352 Naturalist 45.

Burnley, Clutton p. 118 Ent. 53.

Derbyshire, Hayward p. 139 Ent. 53

Windermere, *Geom.*, Littlewood Ent. 53 p. 91.

Scotland, *Pyrameis atalanta*, Carter p. 261 and Corbet l.c. Entomol. 53.

East Lothian, Balfour, *Oxygramma niveana*, Scott. Nat. 1920 p. 20.

Struan *Crymodes*, Whittle p. 199 Scott. Natural. 1920.

Kingussie, *Depressaria hepaticaria*, Pickard-Cambridge p. 21 Ent. 53.

Tyrone, Greer, 780.

East Tyrone, Greer pp. 154–156 Ent. Rec. 32.—E. Tyrone, *Rhop.*, Greer Ent. 53 pp. 76–78.

Poyntzpass, *A. aglaia*, Johnson p. 121 Irish Nat. 29.

Mayo, Rutledge p. 106 Irish Nat. 29.

#### *Diptera*.

North Devon, Hunter, 931.

Tubney, *Criorrhina ranunculi*, Collins p. 92 Ent. Mag. 56.

Shropshire, Bury, 302.

Suffolk, *Sphecolyma*, Morley p. 213 Ent. 53.

Yorkshire, Ashworth & Cheetham, 294; Yorkshire, Cheetham, 362; Yorkshire, Cheetham Naturalist 45 p. 186; Yorkshire, *Syrphidae*, Cheetham p. 96 Naturalist 45; Yorkshire, Cheetham pp. 321 & 324 Naturalist 45; Yorkshire, Cheetham p. 264 Naturalist 45; Yorkshire, Burrell Naturalist 45 p. 240; Yorkshire, Cheetham pp. 390 & 391 Naturalist 45.

Scotland, novelties, Carter p. 29 Scott. Nat. 1920.

Forth, Carter, 326; Forth, Evans, 617; Forth, Grimshaw, 788.

Forfar, Carter, *Spilogaster uliginosa*, Scott. Nat. 1920 p. 58; Forfar, *Eumerus tuberculatus*, Carter p. 200 Scott. Natural. 1920.

Blairgowrie, *Theobaldia arctica*, Carter p. 200 Scott. Natural. 1920.

Atholl, *Cephenomyia*, Carter p. 20 Scott. Nat. 1920.

#### *Hemiptera*.

Cumberland, Day Naturalist 45 pp. 16–18.

Scarborough, Walsh Naturalist 45 p. 328.

Arran, *Zicrona*, Fergusson p. 58 Scott. Nat. 1920.

Slapton Ley, *Xanthochilus quadratus*, Bedwell p. 280 Ent. Mag. 56.

Yare, *Pseudophloeus wallli*, Morley p. 232 Ent. Mag. 56.

#### *Paraneuroptera*.

Eastleigh, Killington p. 191 Ent. 53.

Worcestershire, Williams p. 237 Ent. 53.

Ireland, Langham, 1089.

### (e) Central and Eastern Europe.

#### *Insecta*.

Denmark: Ussing, 1819.

Germany: Schirmer, Mark Brandenburg, D.E.Z. 1916 1917 383 & 384; Berlin, Schirmer p. 397 D.E.Z. 1918; Meunier; Schulze, 1627, 1628.

#### *Coleoptera*.

Mader, 1177; Roubal, 1568.

Denmark: Anderson, 64; Hansen, 809a; Sønderup, 1705; West, 1897.

Netherlands: Everts, Limburg, Ent. Ber. 5 pp. 244 & 245; Everts, 620; MacGillavry, 1171.

Belgium: Boire, p. 178 Ann. Soc. ent. Belgique 60; Carpentier, *Cleonus cinereus*, Ann. Soc. ent. Belgique 60 p. 148; Carpentier, pp. 178 & 179 Ann. Soc. ent. Belgique 60; Frennet, 691, 692; Frennet, Lorraine, Bull. Soc. ent. Belgique 2 pp. 101–103; Guillaume, Curculionidae, p. 122 Ann. Soc. ent. Belgique 60; Guillaume p. 78 Bull. Soc. ent. Belgique 2; Van Dorselaer, 1822.

Germany: Brandenburg, Voss p. 190 D.E.Z. 1919; Delahon, 480, 481, 482; Hubenthal, 918, 919; Künnemann, 1053; Künnemann, Bledius, Ent.

Blätt. 16 p. 241; Neresheimer & Wagner, 1301; Reineck, 1502; Scholz, 1617; Schubart, 1622; Wagner, *Stenus glabellus*, D.E.Z. 1920 p. 230; Warda, Illiger Käfer Preussens, 1857.

Bohemia: Blattný, 234; Blattný & Blattný, 235; Krása, 1042; Knirsch, 1029, 1030, 1031; Wanka, 1855.

Switzerland: Born, 245, 246.

Poland: Tenenbaum, 1771.

Rumania: Liebmann, 1130.

Croatia: Stiller, 1733.

Sarepta: Fleischer, 650.

#### *Hymenoptera.*

Wagner, 1848.

Denmark: Jørgensen, 967; Kryger, 1052.

Netherlands: Lindemans, *Crabro*, Ent. Ber. 5 p. 203; Lindemans, Ichneumonidae, Ent. Ber. 5 p. 201; Lindemans, *Pompilidae*, Ent. Ber. 5 p. 206; Lindemans, *Tiphia*, Ent. Ber. 5 p. 209; Oudemans, 1367; Oudemans, *Schizocera geminata*, Ent. Ber. 5 p. 261; Smits van Burgst, 1698, 1699, 1700.

Belgium: Ball, 127; Dubois, 534, 535.

Germany: Alfken, 57, 58, 59, 60; Brandenburg, *Halictus*, Blüthgen D.E.Z. 1919 pp. 210 & 211; Brandenburg, *Tenthredinidae*, Hedicke p. 206 D.E.Z. 1919; Meyer, 1234; Müller, 1282;

Switzerland: Carl, 321; Santschi, hot-houses, 1591; Steck, *Alyson tricolor*, Mitt. Schweiz. ent. Ges. 13 p. 77.

Wagner, *Formica chevrolati*, D.E.Z. 1920 p. 222.

#### *Lepidoptera.*

Nabokoff, *Rhop.* 1291; Rebel, *Parnassius*, 1491.

Wehrli, 1878.

Denmark: Jensen, 961; Knudsen, 1032.

Netherlands: Oberthür, 1341; Toxopeus, 1794.

Germany: Brandenburg, *Larentia parallelolmeata*, Belling, p. 220 D.E.Z. 1920; Brandenburg, *Chappuis* D.E.Z.

1918 pp. 387-392; Heinrich, 853; Brandenburg, *Microlep.*, Hering pp. 188 & 189 D.E.Z. 1919; Brandenburg, *Microlep.*, Hering pp. 211-213 D.E.Z. 1920; Brandenburg, *Microlep.*, Hering pp. 428-430 D.E.Z. 1919; Brandenburg, *Microlep.*, Hering pp. 433 & 434 D.E.Z. 1920; Warnecke, 1858.

Austria: ANON., 72; Belling, 156; Mitterberger, 1247.

Switzerland: Warren, 1859.

#### *Trichoptera.*

Belgium: Lestage *Ithytrichia lamellaris*, p. 30 Ann. Soc. ent. Belgique 60.

#### *Neuroptera.*

†Handlisch Germany 807.

Switzerland: Steck, 1725.

#### *Diptera.*

Denmark: Henriksen, 864; Kuntze, 1055; Lundbeck, 1148; Nielsen, 1311.

Netherlands: de Meijere, 1214; Schmitz, 1614.

Belgium: Goetgebuer, 761; Goetghebuer & Tonnoir, 762; Tonnoir, 1792; Tonnoir, *Cacoxenus indagator*, p. 63 Ann. Soc. ent. Belgique 60.

Germany: Kramer, 1041; Brandenburg, *Alophora hemiptera*, Lichtwardt p. 431 D.E.Z. 1919; Martini, 1210; Riedel, 1529; Sack, 1581; Brandenburg *Syrphidae*, Schirmer pp. 186<sup>1</sup> & 187 D.E.Z. 1919; Schmitz, 1613; Thienemann, 1779.

Alps: Oldenburg, 1350.

Hungary: Kuntze, 1056.

#### *Aphaniptera.*

Switzerland: Jordan & Rothschild, 988.

#### *Hemiptera.*

Schumacher, 1635.

Denmark: Jacobsen, 952; Jensen-Haarup, 963; Lundblad, 1150.

Germany: Benick, 167; *Coryphaeus gyllenhalii*, Höhne p. 159 D.E.Z. 1920; Lehmann, 1105; Schumacher, 1636; Brandenburg, Schumacher p. 409 D.E.Z. 1919; Brandenburg, *Serenthia ruficornis*, Schumacher p. 203 D.E.Z. 1919.

Poland: Tenenbaum, 1772.



*Thysanoptera*.

Netherlands: Priesner, 1459;  
Bagnall, Hungary, 119.

*Psocoptera*.

Belgium: Ball, p. 178 Ann. Soc.  
ent. Belgique 60.

*Paraneuroptera*.

Brandenburg, *Crociothemis erythraca*,  
Bollow p. 191 D.E.Z. 1919.

*Ephemeroptera*.

Belgium: Lestage, 1119.

*Plecoptera*.

Belgium: Lestage, 1120.

*Orthoptera*.

Czižek, 462.

Mark Brandenburg, Schirmer D.E.Z.  
1918 p. 384.

Silesia: Pax, 1397.

*Protura*.

Switzerland: Handschin, 308.

## (f) France.

*Insecta*.

Hugues, 928; Lacroix, 1069, 1070.

*Coleoptera*.

Barthe, 142; Barthe, pp. 38 & 39  
Miscell. ent. 25; Bedel, 150; Deville,  
500; Garnett, Beaune, p. 49 Canad.  
Ent. 52; Hoffmann, *Aphodius* Bois de  
Boulogne; Miscell. ent. 25 pp. 22 & 23;  
Hustache, 933, 935; Lavagne, *Pseudo-  
phytobius* Bull. Soc. ent. France 1920  
p. 39; Margier, 1201; Normand, 1322;  
Peschet, 1404; Scherdlin, 1605.

*Hymenoptera*.

Lichtenstein, 1125; Lichtenstein &  
Picard, 1128.

*Lepidoptera*.

Blackie, Brittany, *Rhopalocera*, Ent.  
53 p. 277 & 278; Dumont, 540, 545;  
Jackson, Pas-de-Calais and Somme;  
*Rhop.*, Ent. 53; Joannis, 965; Morris,  
Alpes-maritimes, Entomologist 53 pp.  
13-15 & 16; Peyerimhoff, 1409;  
Powell, Angoulême, 1455; Ulmer,  
1817; Walsingham, 1854.

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*Diptera*.

Léger, 1104; Mercier, coast, 1220;  
Parent, 1378, 1379, 1380, 1381; Pierre,  
1436; Séguy, 1646, 1648, 1650; Ville-  
neuve, 1834, 1842.

*Hemiptera*.

Royer, 1575.

*Orthoptera*.

Margier etc., Gard la Camargue;  
Miscell. ent. 25 pp. 29 & 30.

(g) South Europe and Mediter-  
ranean Basin.*Insecta*, collectively.

Ashby, Italy, Ent. Rec. 42 pp. 59-  
63, etc.; Ashby, Turin, Ent. Rec. 32  
p. 228-231; Ginzberger, 751; Houard,  
913; Werner, 1895.

*Coleoptera*.

Absolon, 1a; Apfelbeck, 77, 78;  
Anzat, 104; Blatný, 236; Depoli,  
490, 491; Formánek, 677, 678;  
Fuente, 715; Heyden, 887; Iglesias,  
943; Jeannel, 959; Linke, 1131;  
Matcha, 1211; Moroder, 1258; Müller,  
1276, 1277, 1278, 1280; Netolitzky,  
1302; Normand, 1320, 1321; Oben-  
berger, 1337; Peyerimhoff, 1410, 1411,  
1412, 1413; Rambousek, 1465-1472;  
Reitter, 1504, 1511, 1512, 1513;  
Schatzmayer, 1600, 1601; Schuster,  
1637; Schuster, Egypt and Mesopo-  
tamia, 1639; Stolz, 1735; Tenenbaum,  
1768, 1769, 1770; Voss, 1844, 1845;  
Winkler, 1917, 1918, 1919; Zariquiey,  
1924.

*Hymenoptera*.

Borelli, 244; Ceballos, 342; Dus-  
met, 551; Maidl, 1178; Minozzi, 1242;  
Santschi, 1591; Santschi, 1594; Sil-  
vestri, 1686; Tavares, 1765.

*Lepidoptera*.

Blanchard, Macedonia *Rhop.*, Ent.  
53 p. 139; Chapman, 357; Costantini,  
417; Drenowsky, 533; Dumont, 541,  
543, 544; Escalera, 616; Graves,  
Turkey, Ent. Rec. 32 pp. 105-107;  
Hampson, Palestine, Syria, 804; Le  
Cerf, 1100; Lucas, 1140; Mace, 1167;  
Mace, Macedonia *Heteroc.*, Ent. 53  
pp. 201-205; Querci, Italy, *Rhopalo-  
cera*, Ent. Rec. 32 pp. 223-227; Rebel,

1488, 1492, 1493; Reverdin, 1519; Rothschild, 1559; Rowland-Brown, Macedonia, *Rhop.*, Ent. 53 pp. 106-109; Stauder, 1719, 1720, 1721; Turner, 1806; Verity, 1826; Weiss, 1883; Zerny, 1928.

*Neuroptera*.

Klapálek, 1012; Macedonia, a correction, Mace p. 191 Ent. 53; Navás, 1295.

*Diptera*.

Austen, 102; Becker, 144; Dyar, 557; Kuntze, Corsica, 1057; Villeneuve, 1837; Zerny, 1929.

*Aphaniptera*.

Jordan & Rothschild, 989.

*Hemiptera*.

Alfieri, 56; Bergevin, 176; Codina, 406; Del Guercio, 483; Fuente, 716; Horváth, 912; Leonardi, 1111; Newstead, 1308; Vayssière, 1825.

*Thysanoptera*.

Priesner, 1457, 1458.

*Paraneuroptera*.

Bentivoglio, 168-171.

*Orthoptera*.

Minozzi, 1243; Werner, 1894.

(h) *Caucasus, West & Central Asia*.

*Insecta*, collectively.

Andrews, 71; Barraud, 141; Kneucker, 1026; Navás, 1298.

*Coleoptera*.

Andres, 65; Andrewes, Mesopotamia *Chlaenius*, 68; Breit, 265, 267; Champion, Persia, Arabia, 349; Käufel, 998; Obenberger, 1339; Peyerimhoff, 1414; Rambousek, 1466, 1473; Roubal, 1562, 1565; Scholz, Asia Minor, 1616; Schuster, 1638.

*Hymenoptera*.

Crawley, 442.

*Lepidoptera*.

Holdhaus, 896; Meyrick, 1237; Peile, Mesopotamia, *Rhop.*, Ent. 53 p. 65; Prout, 1460; Rebel, 1494; Stoneham, Mesopotamia, p. 22 Ent. 53.

*Diptera*.

Austen, 102; Barraud, 140; Christophers, 375; Hermann, 877; Patton, 1390, 1392, 1393; Ricardo, 1522; Riedel, 1527, 1528.

*Hemiptera*.

Haupt, 822; Theobald, *Aphidae*, 1777.

*Isoptera*.

Silvestri, 1682.

*Paraneuroptera*.

Morton, 1262, 1263.

*Africa*.

*Insecta*, collectively.

Banks, 131; Carpenter, 322; Esben-Petersen, 614; Gedye, 739; Mansfield-Aders, 1195; Needham, 1299; Silvestri, 1687.

*Coleoptera*.

Achard, 4, 11; Arrow, 86, 91; Aurivillius, 99; Bänninger, 116; Barker, 138; Bedel, 148; Bénard, 158; Benderitter, 159, 160, 161, 162; Benick, 166; Bickhardt, 208, 211; Borchmann, 243; Boucomont, 249; Bourgoin, 254, 255; Champion, 349; Chatanay, 360; Eggers, 594; Gebien, 737; Grouvelle, 790; Hintz, 892; Heller, 857; Horn, 911; Hübenthal, 920; Jordan, 984; Kleine, 1018; Laboissière, 1061-1068; Lallemand, 1084; Lameere, 1087; Lesne, 1112, 1115; Marshall, 1203, 1204, 1205; Maulik, 1212; Moser, 1266, 1267, 1268, 1270, 1271; Obenberger, 1328, 1330, 1331, 1332, 1335, 1338; Ohaus, 1346, 1347; Peschet, 1405; Pic, 1420, 1423, 1426, 1429, 1431, 1432; Schouteden, 1618; Seidlitz, 1651; Sicard, 1679a; Spaeth, 1709; Warren, 1862; Weise, 1884; Wickmann, 1902; Zimmermann, 1931.

*Hymenoptera*.

Arnold, 84, 85; Bridwell, 278; Cockerell, 383, 403; Dodd, 515; Forel, 675; Girault, C. Good H., 754; Kohl, 1036; Maidl, 1179; Santschi, 1588, 1590, 1591, 1592, 1595; Strand, 1738; Turner, 1807, 1809, 1810; Waterston, 1871, 1872.

*Lepidoptera*.

Aurivillius, 999; Bedford, 151; Clark, 376; Gaede, 721; Hampson, 803, 804; Holland, 897; Janse, 953; Jordan, 981, 983, 985; Le Cerf, 1099; Meyrick, 1238, 1239; Prout, 1460; Prout, *Pingasa*, 1462; Rebel, 1490; Rebel & Zerny, 1495; Riley, 1531.

*Trichoptera*.

Banks, 129.

*Neuroptera*.

Banks, 129; Esben-Petersen, 615.

*Diptera*.

Alexander, 24, 25, 26, 30-34, 37, 51; Austen, 101; Becker, 146; Bezzi, 205, 206; Carter, Ingram & Macfie, 329; Dalziel, 465; Edwards, 586; Enderlein, 600, 601; Felt, 629, 631; Gérard, 743; Hendel, 862; Hermann, 876; Lichtwardt, 1129; Mansfield-Aders, 1196; Newstead, 1309; Pomeroy, 1443; Speiser, 1713; Tonnoir, 1790; Ricardo, 1520, 1521; Rodhain & Bequaert, 1543; Vileneuve, 1840, 1841.

*Hemiptera*.

Bergroth, 181; Brain, 259; Distant, 506; Jensen-Haarup, 962; Lallemand, 1083; Lehmann, 1106; Melichar, 1218; Muir, 1287; Newstead, 1308; Poppius, 1444; Theobald, 1776.

*Ellipoptera*.

Bedford, 152, 153.

*Thysanoptera*.

Karny, 996.

*Paraneuroptera*.

Ris, 1535.

*Orthoptera*.

Bruner, 290; Chopard, 372.

*Aptera*.

Brown, 285; Silvestri.

Madagascar and Mascarene  
Islands.

*Insecta*, collectively.

Snell & Tams, Rodrigues, 1702.

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*Coleoptera*.

Achard, 8; Aurivillius, 99; Benderitter, 159; Borchmann, 243; Bourgoin, 252; Calabresi, 312; Fleutiaux, Mauritius, Réunion, 666; Hustache, 932, 936; Lameere, 1087; Marshall, Mauritius, 1205; Moser, 1270, 1271; Obenberger, 1331, 1332; Pic, 1420, 1426, 1427, 1429; Pouillaude, 1450; Seidlitz, 1651.

*Lepidoptera*.

Clark, 376; Hampson, 804; Jordan, 981.

*Trichoptera*.

Banks, 129.

*Diptera*.

Alexander, 26, 32, 33, 51; Austen, Seychelles & Aldabra, 100; Edwards, 587; Enderlein, 603; Silvestri, 1687; Surcouf, 1749.

*Hemiptera*.

Lallemand, 1081, 1083; Melichar, 1218.

*Paraneuroptera*.

Lacroix, 1073.

*Orthoptera*.

Chopard, 372.

Asia, Tropical and Eastern.

(Including Japan.)

*Insecta*, collectively.

†Cockerell, *Dermaptera*, *Diptera*, 388;  
†Fletcher, India, 657; Navás, Japan, 1296; Portevin, 1448; Rothney, India, 1556.

*Coleoptera*.

Achard, 2, 3, 5, 7-10, 12, 13, 14; Andrewes, 66-70; Arrow, 86, 88, 89, 92; Aurivillius, 99; Bänninger, 116; Bedel, 149; Bernhauer, Japan, 183, 185, 186, 192, 193; Bickhardt, 208, 209; Borchmann, 243; Boucomont, 248; Bourgoin, Laos, 252, 253; Calabresi, 313; Cameron, 316, 317, 318; Champion, India, 345, 346, 348; Desbordes, India, 495, 497; Fleutiaux, 663, 664; Gebien, 736, 738; Heller, 856, 859; Hustache, 932, 934, 937; Jeannel, 958; Käufel, 998; Lameere, 1087; Lesne, Yunnan, 1116; Marshall, India, 1205; Maulik, 1213; Moser,

1271; Netolitzky, 1305, 1306; Obenberger, 1329, 1332, 1334, 1338; d'Orchymont, 1355; Pic, 1421, 1422, 1424, 1426, 1427, 1429, 1431, 1432; Portevin, 1447; Rambousek, Buchara, 1476; Reitter, Japan, 1506; Roubal, Tian-Schan, 1569; Voss, 1846; Wagner, Japan, 1849; Wasmann, 1867; Zimmermann, Japan, 1931.

#### *Hymenoptera*.

Cockerell, 383, 387; Cockerell, India, 391, 400, 401; †Cockerell, 384; Dodd, 515; Elliott, Indo-china, 596; Enderlein, 604, 606; Enslin, Japan, 611; Friese, 694, 696, 700, 701; Fullaway, China, 717; Gallardo, Formosa; Girault, 753, 754; Kohl, 1036; Rohwer, India, 1545; Santschi, 1589, 1590, 1591, 1593; Turner, 1808, 1809; Waterston, Ceylon, 1871; Wilcox, Japan, 1906.

#### *Lepidoptera*.

Bell, 155; Evans, India, 618, 619; Fletcher, India, 656, 658; Grosvenor, India, 789; Hampson, 804, 805; Heinrich, Japan, 851; Jurriaanse & Lindemans, 994; Meyrick, 1237; Nakahara, 1293; Prout, 1460; Prout, Formosa, *Gelasma*, 1462; Riley, 1532; Strand, 1739; Wileman, 1908.

#### *Trichoptera*.

Banks, 129.

#### *Neuroptera*.

Banks, 129.

#### *Diptera*.

Alexander, Japan, 38; Alexander, Formosa, 41, 54; Austen, India, 102; Bezzi, 205; Brunetti, 291; Brunetti, 292; †Cockerell, 402; Edwards, 586; Enderlein, 600, 605; Felt, 632; Hendel, 862; Patton, 1396; Ricardo, 1521; Séguy, Japan, 1650; Senior-White, Ceylon, 1654; Stanton, 1718; Surcouf, 1749.

#### *Hemiptera*.

Bergroth, Formosa, 177; Distant, 505; Distant, Scistan, 511; Melichar 1218; Royer, 1574; Takahashi, Japan, 1761, 1762.

#### *Lipoptera*.

Uchida, 1813.

#### *Thysanoptera*.

Ayyar, 112; Karny, Ceylon 996.

#### *Psocoptera*.

Banks, 129.

#### *Plectoptera*.

Banks, 129.

#### *Paraneuroptera*.

Fraser, 684, 686, 688, 690; Laidlaw, 1076, 1078.

#### *Orthoptera*.

Chopard, 369, 372, 374; Hebard, 832; Rehn & Hebard, China, 1499.

#### Asiatic Archipelago.

Java to New Guinea, including Philippines.

#### *Insecta*, collectively.

Schultze, 1624.

#### *Coleoptera*.

Achard, Lombok, 6, 10, 13, 14; Andrewes, 69; Arrow, 86, 92; Auri-villius, 99; Bernhauer, 164, 186, 192, 193; Bickhardt, 208; Blair, 226; Borchmann, 243; Boucomont, 248; Calabresi, 313; Champion, 348; Gebien, 736, 738; Heller, 856-859; Kleine, 1014, 1015, 1016; Lameere, Philippines, 1087; Marshall, 1202; Moser, 1267, 1269, 1271; Obenberger, 1331; Pic, 1425, 1426, 1427, 1429, 1431, 1432; Portevin, 1448, 1449; Schultze, 1625; Seidlitz, 1651; Zimmermann, New Guinea, 1931.

#### *Hymenoptera*.

Cockerell, 383, 396, 397, 398, 399, 400; Dodd, 515; Enderlein, Sumatra 606; Fullaway, 719; Gahan, 722; Girault, Philippines, 754; Kohl, 1036; Santschi, 1593.

#### *Lepidoptera*.

Clark, 376; Eecker, 593; Gaede, Java, 721; Hampson, 804; Jurriaanse & Lindemans, 992; Martin, 1208; Meyrick, 1237; Prout, 1460, 1462; Rothschild, 1557, 1558, 1560, 1561; Swinhoe, 1758; Talbot, 1763; Van den Bergh Lzn, Celebes, 1821; Wileman & South, 1909; Zerny, 1927.

*Trichoptera*.

Banks, 129.

*Neuroptera*.

Lacroix, Borneo, 1072.

*Diptera*.

Bezzi, 204, 205; Dyar, 572; Enderlein, 605; Felt, 630; Ricardo, 1521; Sack, 1580; Stanton, 1718; Stein, 1726, 1727; Swellengrebel & Swellengrebel de Graaf, 1753, 1754, 1755.

*Hemiptera*.

Bergroth, 178; Crawford, 438; Lehmann, 1107; Melichar, 1218; Morrison, 1260.

*Thysanoptera*.

Karny, 997.

*Psocoptera*.

Banks, 129.

*Isoptera*.

Oshima, 1363.

*Plectoptera*.

Banks, 129.

*Ephemeroptera*.

Gravely, 776.

*Paraneuroptera*.

Laidlaw, 1077.

*Orthoptera*.

Hebard, 832.

*Aptera*.

Handschin, 809.

## Australia and Tasmania.

*Coleoptera*.

Arrow, 86, 90; Aurivillius, 99; Bernhauer, 195; Best, Victorian Alps, Victor. Nat. 37 pp. 85-90; Blair, 225; Borchmann, 243; Carter, 330, 331; Goudie, 766; Heller, 857, 859; Horn, 911; Lea, 1094-1097; Obenberger, 1330, 1331, 1338; Pic, 1426; Sharp, 1671; Sloane, 1692; Seidlitz, 1651.

*Hymenoptera*.

Cockerell, Tasmania, 383; Dodd, 515, 516; Emery, 599; Friese, 700; Girault, 752, 755, 756, 757, 758; Santschi, 1589, 1590, 1591; Turner & Waterston, 1811.

*Lepidoptera*.

Aurivillius, 98; Lower, 1138; Meyrick, 1237; Turner, 1805; Swinhoe, 1758.

*Neuroptera*.

Banks, 129.

*Diptera*.

Alexander, 35, 36; Ferguson & Henry, 636; Ferguson & Hill, 637; Hardy, 811, 812, 813; Hendel, 862; Johnston & Bancroft, 979; Ricardo, 1521; Riedel, 1526; Taylor, 1766; Tonnoir, 1791.

*Hemiptera*.

Baker, 121; Bergroth, 180; Muir, 1284; †Tillyard, 1785.

*Isoptera*.

Mjöberg, 1249.

*Orthoptera*.

Hebard, 832; Sjöstedt, 1688.

*Aptera*.

Silvestri, 1685.

## North America.

*Insecta*, collectively.

†Cockerell, 392; Dickerson & Weiss, 502; Dozier, 530; Gibson & Criddle, 746; Hewitt, 884; Notman, 1324.

*Coleoptera*.

Barber, 137; Bernhauer, 189; Blackman, 221; Blatchley, 229-232; Burke, 298, 299; Carr, 324; Casey, 332, 333, 334; Chamberlin, 341; Davis, 469; Dawson, 472; Fall, 624, 625; Fisher, 647; Fisher & Nicolay, 648; Frost, a day's beating, Canad. Ent. 52 pp. 25-29; Garrett, 732; Green, 779; Hopping, 909; Hopping, California, *Pleocomia*, Canad. Ent. 52 p. 217; Knull, 1033; Leng, 1108; Martin, 1206, 1207; Mason, *Cicindela nevadica*, Ent. News 31 p. 221; Morris, Port Hope, Canad. Ent. 52 pp. 73-76; Nicolay & Weiss, 1310; Notman, 1323, 1326; Pierce, 1435; Portevin, 1449; Rosewall, Louisiana in *Robinia*, Canad. Ent. 52 p. 203; Schwarz, 1640; Seidlitz, 1651; Wickham, 1903; †Wickham, 1905; Weiss, 1889.



*Hymenoptera*.

Bequaert, 173, 174; Bradley, 258; Bridwell, 278; Cockerell, 394; Cushman, 455-458; Cushman & Rohwer, 460; Fouts, 681; Girault, 754; Jackson, 951; Kinsey, 1009; Lutz & Cockerell, 1152; MacGillivray, 1173, 1174; Mann, 1194; Muesbeck, 1283; Rohwer, 1544, 1546, 1547; Smith, 1696; Stevens, 1730; Weld, 1892; Wilcox, 1906.

*Lepidoptera*.

Barnes & Busck, 139; Bell, 154; Blackmore, 222; Braun, 260, 261, 262; Busck, 303, 304; Clark, 376; Dyar, 561, 562, 568, 573; Flint & Malloch, 667; Gibson, 744; Heinrich, 849, 850, 852; Leussler, 1123; McDunnough, 1163, 1166; Meyrick, 1237; Mousley, 1274; Skinner, Mississippi, *Syntomidae*, Ent. News 31 p. 263; Watson, 1874; Watson & Comstock, 1875; Wright, 1922.

*Trichoptera*.

Banks, 129.

*Neuroptera*.

Banks, 129.

*Diptera*.

Alexander, 27, 40, 43, 48, 49, 52; Alexander & McAtee, 55; Banks, 130; Chandler, 351; Cresson, 445, 446, 447; Dietz, 504; Dyar, 552, 559, 563-567, 569, 570, 574; Garrett, 731; Hearle, 831; Hendel, 862; Hine, 891; Johnson, 971; Jones, 980; Lovett, 1136; McAtee & Banks, 1159; Malloch, 1181, 1182, 1184-1187, 1189, 1190, 1191; Melander, 1216, 1217; Schmitz, 1612; Van Duce, 1824.

*Aphaniptera*.

Jordan & Rothschild, 987.

*Hemiptera*.

Baker, 121, 122; Baker & Moles, 123; Ball, 125; Barber, 134, 135; Crawford, 439; Davidson, 468; Davis, 470; Drake, 531, 532; Ferris, 638, 639; Knight, 1027, 1028; Lawson, 1092, 1093; McAtee, 1156, 1157; Malloch, 1183; Metcalf & Osborn, 1228; Oestlund, 1345; Osborn, 1359; Parshley, 1383-1386; Patch, 1387; Spooner, New York *Delphacinae*, Ent. News 31 pp. 44-46; Stoner, 1736; Van Duzee, 1823.

*Psocoptera*.

Banks, 129.

*Isoptera*.

Banks & Snyder, 132; Snyder, 1703.

*Zoraptera*.

Candell, 338.

*Plectoptera*.

Banks, 129.

*Paraneuroptera*.

Howe, 916; Howe, Concord, Psyche 27 p. 154.

*Orthoptera*.

Blatchley, 223; Davis, 471; Hebard, 835-839; Morse, 1261; Rehn & Hebard, 1500.

*Aptera, Collembola*.

Macnamara, 1176.

## Central America.

*Coleoptera*.

Arrow, 86; Bernhauer, 187, 188, 196; Calabresi, 313; Casey, 332, 333, 334; Champion, 347, 352; Dietz, 503; Jeannel, 958; Lameere, 1087; Moser, 1271; Obenberger, 1332; Pic, 1426, 1427; Seidlitz, 1651; Spaeth, 1708, 1710.

*Hymenoptera*.

Dodd, 515; Girault, 754; Grandi, 771; Kinsey, 1009; Mann, 1193; Viereck, 1833.

*Lepidoptera*.

Busck, 305; Clark, 376; Draudt, 532a; Dyar, 554, 573; Hallinan, 802; Hampson, 803, 804, 805; Schaus, 1602, 1603, 1604; Skinner, 1689; Strand, 1737.

*Neuroptera*.

Navás, 1294; Navás, Lower California, 1298.

*Diptera*.

Alexander, 47, 50; Arias, 79; Dyar, 563, 567, 571; Hine, 890, 891; Malloch, 1186; Sturtevant, 1743.

*Hemiptera*.

Melichar, 1218.

*Thysanoptera*.

Karny, 996.

*Psocoptera*.

Banks, 129.

*Paraneuroptera*.

Calvert, 314, 315.

*Orthoptera*.

Hebard, 833, 836; Rehn &amp; Hebard, 1500.

Antilles, incl. Bermudas, excl. Trinidad and Tobago.

*Insecta*, collectively.

Smyth, 1701.

*Coleoptera*.

Arrow, St. Vincent, 86, 93; Barber, 137; Casey, 334; Pic, 1426.

*Hymenoptera*.

Mann, 1193; Muesebeck, 1283; Rohwer, Bermuda, 1547.

*Lepidoptera*.

Clark, 376; Kaye, Jamaica, 1000; Ramsden, 1478; Schaus, 1602; Skinner, 1689, 1690, 1691.

*Diptera*.Banks, Cuba, *Laphria*, 130; Dyar, 553, 567; Johnson, 970; Malloch, 1181, 1186; Tonnoir, Jamaica, 1791.*Hemiptera*.

Distant, 508; Drake, 531; Newstead, 1308

*Isoptera*.

Banks &amp; Snyder, 132.

*Orthoptera*.

Bruner, 259.

South America, including Trinidad.

*Insecta*, collectively.

Anon., 74.

*Coleoptera*.

Arrow, 86, 93; Aurivillius, 99; Bernhauer, 187, 190, 194; Bickhardt, 208, 210, 212; Casey, 334; Chapin, 352; Desbordes, 496, 498; Fleutiaux, 665; Gebien, 736; Heller, 861; Horn, 910; Jeannel, 958; Kleine, 1013, 1014; Kolbe, 1039; Lameere, 1087; Moser, 1267, 1271; Obenberger, 1328, 1330, 1331, 1332, 1335, 1338; Pic, 1426, 1427, 1429, 1431; Portevin, 1449; Rambousek, 1467; Seidlitz, 1651; Spaeth, 1708; Théry, 1778; Weise, 1883; Wendeler, 1893.

*Hymenoptera*.

Bertoni, 199-203; Brues, 288, 289; Cockerell, 390; Friese, 695, 700, 701; Gallardo, 727, 729, 730; Girault, Trinidad, 754; Herbst, 871, 873, 874; Porter, 1446; Roman, 1549; Santschi, 1588, 1596; Schrottky, 1621.

*Lepidoptera*.

Clark, 376; Closs, 382; Dognin, 520; Draudt, 532a; Dyar, 560; Fassl, 626; Forbes, 673; Gschwander, 791; Hampson, 803, 804; Kaye, 1000; Meyrick, 1237; Moss, 1272; Prout, 1460, 1462; Schaus, 1602, 1603, 1604; Silva Figueroa, 1680, 1681; Skinner, 1689; Stichel, 1732; Zerny, 1927.

*Trichoptera*.

Banks, 129.

*Neuroptera*.

Navás, 1294, 1297, 1298.

*Diptera*.

Alexander, 28, 29, 42, 44, 45, 46, 47, 50; Becker, 147; Duda, 538; Dyar, 558, 567; Edwards, 578; Engel, 608; Franca; Hendel, 862; Hine, 890, 891; Johnson, 972; Malloch, 1186; Sack, 1583; Surcouf, 1749, 1750; Tonnoir, 1791.

*Aphaniptera*.

Jordan &amp; Rothschild, 987.

*Hemiptera*.

Distant, 509, 510; Goding, 760; Jensen-Haarup, 962; Melichar, 1218; Newstead, 1303.

*Lipoptera*.

Lahille, 1075.

*Psocoptera*.

Banks, 129.

*Plectoptera*.

Banks, 129.

*Paraneuroptera*.

Campion, 320; Lacroix, 1073; Navás, 1294; Williamson, 1915, 1916.

*Orthoptera*.

Chopard, 370, 372, 373; Hebard, 833, 840; Rehn, 1498.

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*Acylophorus scutellaris* sp. n. Borneo, BERNHAUER p. 21 Col. Rundsch. 5 1916.—*A. bipunctatus* sp. n. India p. 219, CAMERON Ent. Mo. Mag. 56.

*Adelarthra* gen. n. p. 222 near *Oligota*, *barbara* sp. n. Singapore p. 223, CAMERON Tr. ent. Soc. London 1920.

*Aleochara puberula* = (*Oxyopoda analis* MacL.), LEA p. 375 P. Linn. Soc. N.S.W. 45.—*A. algarum*, parasitic habits, SCOTT pp. 148-153 Ent. Mo. Mag. 56.

*Algon immsi* sp. n. Himalaya p. 54, BERNHAUER Col. Rundsch. 4 1915.

*Amichrotus elegans* sp. n. Coorg p. 218, CAMERON Ent. Mo. Mag. 56.

*Amphichroum pindarense* sp. n. India p. 243, CHAMPION Ent. Mo. Mag. 56.

*Anthobium limbatum* var. n. *analogicum*, ROUBAL p. 19 Col. Rundsch. 4 1915.—*A. umbricolor* sp. n. Caucasus p. 62, ROUBAL T.c.—*A. indicum* sp. n. p. 243, CHAMPION Ent. Mo. Mag. 56.

*Apimela indica* sp. n. Ceylon p. 99, CAMERON Ent. Mo. Mag. 56.

*Apocellagria* gen. n. p. 143 near *Apocellus*, *indica* sp. n. p. 144, CAMERON T.c.

*Astenus maculatus* sp. n. India p. 146, CAMERON T.c.—*A. lazonicus* sp. n. p. 363, BERNHAUER D.E.Z. 1919 1919.—*A. castaneus* sp. n. Singapore p. 281, CAMERON Tr. ent. Soc. London 1920.

*Atheta* (*Aloconota*) *mihoki* p. 133, *A.* (*Philhygra*) *anisi*, spp. n. Austria, *spelaea* var. n. *macroptera* p. 134, BERNHAUER Col. Rundsch. 2 1913.—*A.* (*Hilara*) *jelineki* sp. n. Bohemia p. 147, KRÁSA Col. Rundsch. 3 1914.—*A.* (*Aloconota*) *peguana* Pegu p. 30, *A.* (*Taxicera*) *sarawakensis*, *heuwiti*, Borneo p. 31, spp. n., BERNHAUER Col. Rundsch. 4 1915.—*A.* (*Spelaeocolla* subg. n.) *absoloni* sp. n. Herzegovina, RAMBOUSEK Acta Soc. ent. Bohem. 12 1 & 2 1915 and Col. Rundsch. 4 1915 p. 129.—*A.* (*Taxicera*) *floralis* Tenasserim p. 21, *A.* (*Philhygra*) *sinuatocrenata* Himalaya p. 22, spp. n., BERNHAUER Col. Rundsch. 5 1916.—*A.* *woerndlei* sp. n. Innsbruck p. 23, BERNHAUER Col. Rundsch. 6 1917.—*A.* (*Microdota*) *sericina* nom. n. for *sericata* Mulsant & Rey p. 186, *nova* nom. n. for *impressicollis* Bernhauer p. 187, *catharinae* nom. n. for *parallela* Bernhauer p. 187, *A.* (*Metaxya*) *poppiusi* nom. n. for *praticola* Poppius p. 197, *vega* nom. n. for *atricornis* Sahlb. p. 198, *A.* (*Dimetrota*) *stercoris* nom. n. for *columbica* Bernhauer, *maeklini* nom. n. for *moesta* Maeklin, *fauveli* nom. n. for *acuticollis* Fauvel, p. 205, *A.* *duplicata* nom. n. for *unigranosa* Bernhauer p. 213, *A.* (*Traumoecia*) *pugnans* nom. n. for *militaris* Casey p. 218, FENYES Gen. Ins. fasc. 173b.—*A.* (*Ceritaxa*) *portu-veneris* sp. n. France p. 247, NORMAND Bull. Soc. ent. France 1920.—*A.* *australensis* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 25.—*A.* (*Coprothassa*) *anepsia* sp. n. Ceylon p. 95, CAMERON Ent. Mo. Mag. 56.—*A.* (*Glossola*) *moultoni* p. 255, *A.* (*Metaxya*) *alophila*, *A.* (*Drastica*) *picea*, p. 256, *A.* (*Microdota*) *melata*, *malayana*, p. 257, *vulgaris* p. 258, *purpurascens*, *A.* *miriventris*, p. 259, *A.* (*Dimetrota*) *carpophila* p. 260, *xylophila* p. 261, *mycetophaga*, *A.* (*Datomicra*) *onthophila*, p. 262, *mycetophila* p. 263, *A.* (*Colpodota*) *ruparia*, *A.* (*Acrotona*) *rufiventris*, p. 264, spp. n. Singapore, CAMERON Tr. ent. Soc. London 1920.—*A.* *macrops* p. 725, *A.* (*Hilara*) *fulviceps* p. 726, spp. n. Florida, NOTMAN Bull. Amer. Mus. 42.

*Bacillopsis* subg. n. vide *Cylindropsis*.

*Belonuchus* *bakeri* sp. n. Philippines p. 25, BERNHAUER Col. Rundsch. 4 1915.

*Bernhaueria* gen. n. near *Phloeopora*, *paradoxa* sp. n. Belgrade, RAMBOUSEK p. 87 Col. Rundsch. 5 1916.

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*Bledius* (*Elbidus*) *taruensis* sp. n. India p. 144, CAMERON Ent. Mo. Mag. 56.—*B.* *minutus*, *minor*, spp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 6.—*B.* *nigriceps* p. 696, *canaliculatus* p. 698, spp. n., Florida, NOTMANN Bull. Amer. Mus. 42.

*Bolitobius indicus* sp. n. Madura p. 41, BERNHAUER Col. Rundsch. 6 1917.—*B.* *apicicornis* sp. n. Mexico p. 45, BERNHAUER Wien. ent. Zeit. 38.

*Borolinus sikkimensis* India p. 359, *oceani* Philippines p. 360, spp. n., BERNHAUER D.E.Z. 1919 1919.

*Calodera dubia* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 26.

*Chilomorpha* gen. n. p. 146 near *Chilopora*, *bernhaueri* sp. n. Bohemia p. 147, KRÁSA Col. Rundsch. 3 1914.

*Chledophila* gen. n. p. 231, *Bolitocharini*, *annularis* sp. n. Singapore p. 232, CAMERON Tr. ent. Soc. London 1920.

*Coenonica angusticollis* p. 240, *stricticollis* p. 241, spp. n., Singapore, CAMERON T.c.—*C.* *parviceps* sp. n. Philippines p. 29, BERNHAUER Col. Rundsch. 4 1915.

*Conosoma hémisphaericum* p. 57, *kashmiricum* p. 58, spp. n., India, BERNHAUER T.c.—*C.* *transcaspicum* sp. n., *testaceum* var. n. *sicilianum*, BERNHAUER p. 19 Col. Rundsch. 6 1917.—*C.* *malayanum* sp. n. Singapore p. 283, CAMERON Tr. ent. Soc. London 1920.—*C.* *ferrugineum* sp. n. Mexico p. 46, BERNHAUER Wien. ent. Zeit. 38.

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*Cryptobium paradoxum* sp. n. Hanoi p. 50, BERNHAUER Col. Rundsch. 4 1915.—*C.* *sanguinicolle* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 14.



*Cylindropsis peyerimhoffi* p. 128, *C. (Bacillopsis* subg. n.) *cribellata* p. 129, spp. n., Tunis, NORMAND Bull. Soc. ent. France 1920.

*Deralia* gen. n. *Bolitocharini*, *fuscipennis* sp. n. Singapore, CAMERON Tr. ent. Soc. London 1920.

*Dianous championi* sp. n. India p. 145, CAMERON Ent. Mo. Mag. 56.

*Dibelonetes mjobergi* p. 10, *queenslandicus*, *antipodum*, p. 11, spp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8.

*Diastota subopaca* sp. n. Ceylon p. 50, CAMERON Ent. Mo. Mag. 56.

*Disoporina* subgen. n. of *Atheta*, FENYES Gen. Ins. fasc. 173b p. 205.

*Elachistarthron* gen. n. *Elachistarthronini* trib. n., *ambiguum* sp. n. Florida, NOTMAN p. 715 Bull. Amer. Mus. 42.

*Eudeliphrum* gen. n. near *Deliphrum*, *gracilipalpe* sp. n. India p. 245, CHAMPION Ent. Mo. Mag. 56.

*Eulissus amicus* Peru, *semipurpureus* Panama, spp. n. p. 26, BERNHAUER Col. Rundsch. 5 1916.

*Eamicrota anomala* p. 718, *insolita* p. 719, spp. n. Florida, NOTMAN Bull. Amer. Mus. 42.

*Eusteniamorpha* gen. n. p. 253 near *Falagria*, *rufa* sp. n. Singapore p. 254, CAMERON Tr. ent. Soc. London 1920.

*Exatheta* gen. n. p. 265 near *Atheta*, *cingulata*, *consors*, spp. n. Singapore p. 266, CAMERON T.c.

*Falagria tenuicornis*, *brevicornis*, p. 252, *flavipennis* p. 253, spp. n. Singapore, CAMERON T.c.—*F. ceylonica* p. 94, *asperata* p. 95, spp. n. Ceylon, CAMERON Ent. Mo. Mag. 56.—*F. malandae* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 24.

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*Formicocephalus* gen. n. p. 276, *aranscopus* sp. n. New Caledonia p. 276 fig., HELLER Nova Caledonia Zool. 2 1916.

*Gabrius*, revision, with figs. of aedeagus pp. 115–157 pl. iii, *doderoi*

Sicily p. 135 pl. iii f. 4, *ravasinii* Carinthia p. 147 f. 13, spp. n., GRIDELLI Ann. Mus. Genova 49.

*Gauropterus nigroaeneus* sp. n. India p. 146, CAMERON Ent. Mo. Mag. 56.

*Genosema* gen. n. p. 720 near *Hoplandria*, *sexualis* sp. n. Florida NOTMAN Bull. Amer. Mus. 42.

*Geodromicus crassipalpis* p. 245, *amnicola* p. 246, spp. n. India, CHAMPION Ent. Mo. Mag. 56.

*Gnypeta bucharica* sp. n. Buchara p. 96, RAMBOUSEK Col. Rundsch. 5 1916.

*Gyrophaena albicornis* sp. n. Samoa, BERNHAUER p. 689 Denk. Ak. Wien 89 1914.—*G. tuberculiventris* sp. n. Himalaya p. 58, BERNHAUER Col. Rundsch. 4 1915.—*G. rufiventris* sp. n. Ceylon p. 50, CAMERON Ent. Mo. Mag. 56.—*G. tridentata* p. 215, *granulosa crenulata*, p. 216, *cristata*, *bidens*, p. 217, *dubia*, *irregularis*, p. 218, *moultoni*, p. 219, *G. (Phaenogyra) metallica* p. 220, spp. n. Singapore, CAMERON Tr. ent. Soc. London 1920.—*G. punctipennis* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 19.

*Habrocerus capillarcornis*, male structures, MUIR p. 398–403 pl. xx Tr. ent. soc. London 1919.

*Hesperus bakeri* sp. n. Philippines p. 364, BERNHAUER D.E.Z. 1919 1919.

*Hetairotermes* nom. n. for *Termophila* Lea, *agilis*, p. 223, *piceus* p. 224, spp. n. Singapore, CAMERON Tr. ent. Soc. London 1920.

*Heterota arenaria* sp. n. Singapore p. 251, CAMERON T.c.

*Heterothops magniceps* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 17.

*Holisomorphus* gen. n. p. 283 for *Holisus parvus* and *cingulatus*, CAMERON Tr. ent. Soc. London 1920.

*Holusus philippinus* sp. n. Palawan p. 360, BERNHAUER D.E.Z. 1919 1919.

*Homalota nitescens*, *bidens*, p. 247, *cingulata*, *fuscipennis*, p. 248, *serrata* p. 249, *denticulata* p. 250, spp. n. Singapore, CAMERON Tr. ent. Soc. London 1920.—*H. trinotata*, habits, SCOTT p. 156 Ent. Mo. Mag. 56 and FALCONER p. 248 Naturalist 45.



*Hoplandria fungivora* sp. n. Singapore p. 277, CAMERON Tr. ent. Soc. London 1920.

*Hypatheta* subgn. n. of *Atheta*, FENYES p. 206 Gen. Ins. 173b.

*Hypostenus rugosissimus* p. 173, *flavovittatus, flexuosus*, p. 174, spp. n. India, CHAMPION Ent. Mo. Mag. 56.

*Lamprinus saginatus* = (*hamais-troemi* Luze), BERNHAUER p. 23 Col. Rundsch. 6 1917.

*Lampromalota* gen. n. near *Homalota*, *brunneicollis* sp. n. Singapore, CAMERON p. 246 Tr. ent. Soc. London 1920.

*Lathrobium quadricolle* = (*bogadjiani* R.), RAMBOUSEK p. 95 Col. Rundsch. 5 1916.

*Leptacinus minimus* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 15.

*Leptusa mjoeborgi* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 23.

*Lesteva fluviata* sp. n. India p. 246, CHAMPION Ent. Mo. Mag. 56.

*Leucocraspedum limbatum* sp. n. Ceylon p. 49, *nigromaculatum* var. n. *obsoletum* p. 50, CAMERON Ent. Mo. Mag. 56.

*Leucoparyphus picturatus* sp. n. E. Siberia p. 121, REITTER Col. Rundsch. 2 1913.

*Lispinus excellens* sp. n. Java p. 18, BERNHAUER Col. Rundsch. 5 1916.—*L. sharpi* sp. n. Singapore p. 278, CAMERON Tr. ent. Soc. London 1920.

*Lomechusa turkestanica* sp. n. p. 46, ROUBAL Col. Rundsch. 5 1916.—*Lomechusa*, and allies, WASMANN Abt. theor. biol. 4 173 pp. 2 pls.

*Lophomycter* gen. n. near *Hoplandria*, *laevicollis* sp. n. Florida, NOTMAN p. 722 Bull. Amer. Mus. 42.

*Medon bakeri, luzonicus*, p. 22, Philippines, *matangensis* Borneo, *siamensis*, p. 23, spp. n., BERNHAUER Col. Rundsch. 4 1915.—*M. laticeps* sp. n. E. Siberia p. 95, RAMBOUSEK Col. Rundsch. 5 1916.—*M. molestus* sp. n. Platiessa p. 149, *brunneus robustior* subsp. n. Caucasus p. 150, ROUBAL N. Beitr. syst. Insk. 1.—*M. orientalis* p. 281, *M. (Charichirus) terminalis* p. 282, spp. n. Singapore, CAMERON Tr. ent. Soc. London 1920.

*Megalops quinque maculatus* Venezuela, *braziliensis, bipustulatus*, Brazil, p. 10, *obliquistriatus* Caraccas p. 11, spp. n., BERNHAUER N. Beitr. syst. Insk. 2.

*Metolinus* gen. n. for *Meioponcus leucocnemis* Kr., and *basalis* sp. n. India, CAMERON p. 147 Ent. Mo. Mag. 56.

*Micropeplus doderoi* sp. n. Pyrénées or. p. 246, NORMAND Bull. Soc. ent. France 1920.

*Mitomorphus ovaliceps* sp. n. India p. 147, CAMERON Ent. Mo. Mag. 56.

*Mimacrotona* gen. n. p. 268 near *Atheta, cingulata* sp. n. Singapore p. 269, CAMERON Tr. ent. Soc. London 1920.

*Mimatheta* gen. n. near *Atheta, fungicola* sp. n. Singapore, CAMERON T.c.

*Mimomalota* gen. n. p. 242 near *Homalota, bispina, testacea*, spp. n. Singapore p. 243, CAMERON T.c.

*Mycetoporus mediterraneus* Morea, *pustulatus* Buchara, p. 17, *macrocephalus* Italy p. 18, spp. n., BERNHAUER Col. Rundsch. 6 1917.

*Myllaena acuta* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 19.—*M.*, table of North American pp. 707–709, *cuneata, curraz*, spp. n. Florida p. 710, NOTMAN Bull. Amer. Mus. 42.

*Myrmedonella* gen. n. p. 274 *Aleocharini, rufa* sp. n. Singapore p. 275, CAMERON Tr. ent. Soc. London 1920.

*Myrmedonia opacicollis* sp. n. Ceylon p. 98, CAMERON Ent. Mo. Mag. 56.—*M. apicalis* sp. n. Singapore p. 273, CAMERON Tr. ent. Soc. London 1920.

*Myrmedonota* gen. n. near *Myrmedonia, cingulata* sp. n. Singapore, CAMERON T.c.

*Naddia rufipennis* sp. n. Burma p. 54, BERNHAUER Col. Rundsch. 4 1915.

*Neobrachida* gen. n., *castanea* sp. n. Ceylon, CAMERON p. 51 Ent. Mo. Mag. 56.

*Neomalota* gen. n. p. 244 near *Homalota, cingulata* sp. n. Singapore p. 245, CAMERON Tr. ent. Soc. London 1920.

*Neopinophilus* gen. n. p. 279 for *P. notabilis* C., CAMERON T.c.

*Neosilusa* gen. n. p. 232 type *Silusa japonica* Kr., moultion sp. n. Singapore p. 233, CAMERON T.c.

*Noumea trigonocephala* p. 273 fig., *camponotus* p. 274, *ovocephala* p. 274, *plicatula* p. 275, spp. n. New Caledonia, HELLER Nova Caledonia Zool. 2 1916.

*Nudobius lentus* ab. n. *picipennis*, EVERTS p. 288 Ent. Ber. 5.

*Oedichirus grandis* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 7.

*Oideprosoma* gen. n. p. 313 near *Paracrotoca*, *mirandum* sp. n. Guinea p. 315, SILVESTRI Boll. Lab. Portici 14.

*Oligolinus grandis* sp. n. Luzon p. 364, BERNHAUER D.E.Z. 1919 1919.

*Oligota forticornis*, *moultoni*, spp. n. Singapore p. 212, CAMERON Tr. ent. Soc. London 1920.

*Omalium altivagans* sp. n. Kashmir p. 49, BERNHAUER Col. Rundsch. 4 1915.—*O. almoresense* sp. n. India p. 241, CHAMPION Ent. Mo. Mag. 56.—*O. italicum* ab. n. *vanderwielii*, EVERTS p. 238 Ent. Ber. 5.

*Omoschema* gen. n. p. 731 near *Stenagria*, *laticeps* sp. n. Florida p. 732, NOTMAN Bull. Amer. Mus. 42.

*Ophioomma* gen. n. p. 704 near *Hyptioma*, *rufa* sp. n. Florida p. 705, NOTMAN T.c.

*Orphnebia* gen. n. near *Myrmedonia* p. 97, *rufocastanea* sp. n. Ceylon p. 98, CAMERON Ent. Mo. Mag. 56.

*Orphnebius cingulatus* p. 96, *bryanti* p. 97, spp. n. Ceylon, CAMERON T.c.

*Orthodiatelus* gen. n. *Elachistarthronini*, *innotabilis* sp. n. Florida, NOTMAN p. 716 Bull. Amer. Mus. 42.

*Osorius robustus* sp. n. India p. 145, CAMERON Ent. Mo. Mag. 56.—*O. brevicornis* sp. n. Florida p. 698, NOTMAN Bull. Amer. Mus. 42.—*O. densicollis* sp. n. Luzon p. 360, BERNHAUER D.E.Z. 1919 1919.—*O. granulatus*, *sahlbergi*, *alternans*, p. 137, *columbinus*, *wasmani*, p. 138, *sinuatocollis* p. 139, vol. 1, *laeviusculus*, *sublaevis*, 2 p. 9, spp. n. Amer. mer., BERNHAUER N. Beitr. syst. Insk.

*Ousilusa* gen. n. p. 234 *Bolitocharini*, *myrmicobia*, *castanea*, spp. n. Singapore p. 235. CAMERON Tr. ent. Soc. London 1920

*Orphnebius luzonicus* sp. n. p. 29, BERNHAUER Col. Rundsch. 4 1915.

*Oxyopoda antipodum* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 26.—*O. (Demosoma) schaefferi* sp. n. New York p. 193, NOTMAN J. N. York ent. Soc. 28.

*Oxytelus (Anotylus) bakeri* sp. n. Luzon p. 21, BERNHAUER Col. Rundsch. 4 1915.

*Paederus (Pseudopaederus) sjoestedti* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 9.—*P. cartaginis* sp. n. Costa Rica p. 44, BERNHAUER Wien. ent. Zeit. 38.

*Palaminus bryanti* sp. n. Singapore p. 280, CAMERON Tr. ent. Soc. London 1920.—*P. malandanus* p. 8, *maculatus* p. 9, spp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8.—*P. asymmetricus* sp. n. Costa Rica p. 44, BERNHAUER Wien. ent. Zeit. 38.

*Paracoproporus* subg. n. vide *Coproporus*. BERNHAUER 1917.

*Paracrotoca* n. gen. p. 308, *akermani* p. 309, anatomy, WARREN pp. 297–366 Ann. Natal Mus. 4 6 pls.

*Paraleochara* gen. n. p. 275 near *Aleochara*, *fungivora* sp. n. Singapore p. 276, CAMERON Tr. ent. Soc. London 1920.

*Paratheta* gen. n. p. 269 near *Atheta*, *carnivora* sp. n. Singapore p. 270, CAMERON T.c.

*Parocypus* subg. n. vide *Staphylinus*. BERNHAUER 1915

*Pelekoglossa* gen. n. p. 226 *Bolitocharini*, *cingulata* sp. n. Singapore p. 227, CAMERON Tr. ent. Soc. London 1920.

*Peliopoda pernitida* sp. n. Ceylon p. 96, CAMERON Ent. Mo. Mag. 56.

*Philonthus nigrolineatus* p. 130, *gabrioides* p. 131, spp. n. E. Siberia, *dimidiatus* var. n. *heinemanni* p. 130, BERNHAUER Col. Rundsch. 2 1913.—*P. densiventris*, *sublaevis*, spp. n. Luzon p. 24, BERNHAUER Col. Rundsch. 4 1915.—*P. kashmiranus*, *himalayicus*, spp. n. India, BERNHAUER p. 52 Col. Rundsch. 4 1915.—*P. paganettii* sp. n. Calabria p. 111, LINKE Col. Rundschau 4 1915.—*P. peruvianus*, *imperialis*, p. 28, *fassli* p. 29, *quadricolor*, *viridiniger*, p. 30, *metallifer* p. 31, *subaeneipennis*, *pauper*, p. 32, *grandiceps*, *caliensis*, p.

33, *cordilleranus* p. 34, Colombia, *bolivianus* p. 35, *catamarcanus*, Argentina, p. 36, *auripennis* Bolivia, *excellens* Colombia, p. 37, *klimschi* p. 38, *riedeli* p. 39, *brasilianus* p. 40, Brazil, *spp.* n., BERNHAUER Col. Rundsch. 5 1916.—*P. varius* var. n. *thessalicus* p. 45, ROUBAL Col. Rundsch. 5 1916.—*P. andrevesi* p. 214, *nilgiriensis* p. 215, *sericoilius*, *indicus*, p. 216, *maculatus* p. 217, *spp.* n. India, *geminus* var. n. *inornatus* p. 215, CAMERON Ent. Mo. Mag. 56.—*P. agilis* ab. n. *piceicornis*, *fenestratus* ab. n. *concolor*, *varians* ab. n. *piceicornis*, p. 6, *longicornis* ab. n. *piceicornis*, GRIDELLI Atti Acc. Vens.-Trent. 11.—*P. apenninus* and *immundus* p. 50, *bimaculatus* p. 54, aedeagus, GRIDELLI Bull. Soc. ent. ital. 51 pl. i.—*P. aeneus* = (*Cafius amblyterus* and *laeus* Oll.), LEA p. 375 P. Linn. Soc. N.S.W. 45.

*Philorhinum floricola* sp. n. India p. 242, CHAMPION Ent. Mo. Mag. 56.

*Phloeonomus* (*Phloeostiba*) *pinicola* sp. n. India p. 243, CHAMPION T.C.

*Pinophilus orientalis* sp. n. Singapore p. 278, CAMERON Tr. ent. Soc. London 1920.—*P. neocaledonicus* sp. n. New Caledonia p. 272, HELLER Nova Caledonia Zool. 2 1916.

*Placusa conura* p. 227, *bispina*, *lobata*, p. 228, *notabilis* p. 229, *spp.* n. Singapore, CAMERON Tr. ent. Soc. London 1920.

*Plagiathrina* subg. n. of *Metaxya*, *fordhamiana* sp. n. England, KEYS p. 131 Ent. Mo. Mag. 56.

*Plagiusa* subg. n. vide *Silusa*. *Bernhauseri* 1915.  
*Planeustomus pusae* sp. n. India p. 143, CAMERON Ent. Mo. Mag. 56.

*Platyola antarctica* sp. n. Australia, BERNHAUER Ark. Zool. 13 No. 8 p. 26.

*Platystethus ohausi* sp. n. Ecuador p. 361, WENDELER D.E.Z. 1920.

*Plesiophilus* subg. n. vide *Staphylinus*.  
*Polylobus*, Australian synonymy, LEA p. 376 P. Linn. Soc. N.S.W. 45.

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*Prosilusa* gen. n. p. 236 *Bolitocharini*, *rufa* sp. n. Singapore p. 237, CAMERON Tr. ent. Soc. London 1920.

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†*Pelidontites* **gen. n.**, *atarus* **sp. n.** *eocene* Bournemouth p. 462 f. 6, COCKERELL Ann. Nat. Hist. 5.

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*d* *Mimelasma* subgen. n. of *Alphasida*, *leperina* sp. n. Algiers, p. 21, REITTER Verh. Ver. Brünn 55 1917.

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*Tenebrio molitor*, JOHANSSON Lund Univ. Årsskr. N.F. 16 Aod. 2 No. 5 36 pp.; natural history, HEIN pp. 227-264, figs. J. Genetics 10.

†*Tenebrionites* gen. n., *anglicus* sp. n. eocene Bournemouth, COCKERELL p. 67 Ann. Nat. Hist. 6.

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*Zophosis*, notes on numerous species, LESNE pp. 14–19 Bull. Mus. Paris 1920.  
—*Z. latipennis* sp. n. Buluwayo p. 23, CHATANAY Bull. Mus. Paris 1920.—*Z. puncticollis*, *cariniceps*, p. 39, *pedinoides* p. 40, spp. n. S.W. Africa, GEBIEN Abh. Hamb. Univ. 5.

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*Hemilexis paucisetis* sp. n. Tasmania p. 377, DODD Tr. ent. Soc. London 1919.

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*Idiotypa pallida* Ashm. to *Neopria*, DODD p. 379 T.c.

*Immsia* Cam. merged in *Telenomus*, DODD pp. 353 & 355 T.c.

*Laelius utilis* sp. n. Virginia on *Anthrenus*, COCKERELL p. 34 Canad. Ent. 52.

*Lapitha citreicoxa* Borneo p. 330, *javanica* p. 331, *divina* p. 332, Java, spp. n., DODD Tr. ent. Soc. London 1919.

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*Macroteleia gracilicornis* St. Helena p. 325, *emarginata* Borneo p. 326, *perkinsianus* Queensland p. 327, spp. n., DODD Tr. ent. Soc. London 1919.—*M. ruskini* p. 179 sp. n. Illinois, *floridana* var. n. *goldsmithi* p. 180, GIRAULT P.U.S. nat. Mus. 58.

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*Megaspilus mandibularis* sp. n. Queensland p. 366, DODD T.c.—*M. crawfordi* sp. n. U.S. p. 60, MANN P. ent. Soc. Washington 22.

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*Merriwa* gen. n. p. 332 near *Dichoteleas*, *quadridentata* sp. n. Java p. 333, DODD T.c. 1919.

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*Paramesius caniculatus* Cam. to *Hoplopria*, DODD p. 376, *longior* sp. n. Borneo p. 378, *P. chiriquensis* Cam. to *Pentapria* p. 379 T.c.

*Parascelio* gen. n. p. 341 near *Macroteleia*, *undulatus* sp. n. Mexico p. 342, DODD T.c. 1919.

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*Prosozylabis pictipennis* sp. n. Tasmania p. 445, DODD P. Linn. Soc. N.S.W. 45.

*Pseudogonatopus sogatea* sp. n. India p. 160, ROHWER P.U.S. nat. Mus. 57.

*Romilius* Walk. = (*Triteleia* Kieff.), DODD p. 328 Tr. ent. Soc. London 1919.

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*Spilomicrus* Westw. = (*Bothriopria* D.), *S. gracilis* D. to *Hemitea* p. 376, *tinctipennis* Cam. to *Neopria* p. 379, DODD Tr. ent. Soc. London 1919.

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*Trichoteleia atripes* **spp. n.** New Guinea p. 337, DODD Tr. ent. Soc. London 1919.

*Trimorus politiceps* p. 359, *politus* p. 360, **spp. n.** Java, DODD T.c.

*Trissolcus edessae* **spp. n.** Louisiana p. 65, FOUTS P. ent. Soc. Washington 22.

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European *Trichogramminae*, KRYGER Ent. Medd. 13 pp. 183-188.

In P.U.S. nat. Mus. 58 No. 2332, GIRAULT refers to species, apparently previously described by him, but not seen by the recorder; the titles given are "Chalcid. nova marilandensis 1917"; "Descr. Chalc. cum obs. 1917"; "New Eulophidae 1917"; "two new Achrysocharellae 1917"; "new chalcid flies 1917"; some of the species are redescribed in No. 2332.

*Abella subflava*, parasite of *Eutettix tenella* p. 250, STAHL J. Agric. Res. 20.

*Ablerus diana* **spp. n.** Queensland p. 49, GIRAULT Insec. inscit. 8.

*Acanthochalcis unispinosa* **spp. n.** Texas p. 194, GIRAULT P.U.S. nat. Mus. 58.

*Achrysocharella cruy* **spp. n.** Sydney p. 2, GIRAULT Redia 14 1918.

*Achrysocharis camilli* **spp. n.** U.S. p. 196, GIRAULT P.U.S. nat. Mus. 58.

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*Anabrolepis* gen. n. p. 431 near *Habrolepis* and including *H. zetterstedtii*, *extranea* **spp. n.** Oahu p. 434 figs., TIMBERLAKE P. hawai. ent. Soc. 4.

*Anagrus giraulti*, parasite of *Eutettix* p. 250, STAHL J. Agric. Res. 20.

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*Aphelinidea* gen. n. *Trichogrammatidae iucunda*, *nigriculæ* spp. n. Queensland p. 201, GIRAULT T.C.

*Aplastomorpha vandinei* Tuck = (*australiensis* Gir.), GAHAN p. 239 P. ent. Soc. Washington 22 1921.

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*Astichomyia* [gen. n. Descr. Chalc. var. cum obs. 1917 p. 4] p. 202, *laticaput* Gir. p. 5, GIRAULT T.C.

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*Centrobia silvestrii* sp. n. Europe (= *walkeri* Silv.), KRYGER p. 186 Ent. Meddel. 13.

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Catalogue of *Lepidoptera* Arctianae and Phalaenoididae xxiii + 619 pp., pls. xlii-xxxi British Museum 1920. This vol is supplementary to vol. iii of the original work published 1904 then called Arctiidae and Agaristidae. It includes descriptions of the forms since described, and in addition to the 30 pls. has 112 text-figs. We have not attempted to deal with its synonymy which arises chiefly from generic changes. The species figured in the Atlas are fully given by us below.

S. African Notodontidae, JANSE  
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Notes on Oberthür Faune des *Lép.* de la Barbarie, ROTHCHILD Novit. Zool. 27 pp. 1-127 pls. xiv-xvii: the critical remarks in this paper are so numerous that only a selection from them is given below. The plates did not accompany the text.

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INCLUDING

## ENTEROPNEUSTA AND PTEROBRANCHIA

BY

J. R. NORMAN.

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As experience shows that the adoption of "Arthropoda" and "Vertebrata" as separate sections gives rise to an useless repetition of titles without any corresponding advantage, it has been decided that these two divisions may be dispensed with in future in the Zoological Record.

[EDITOR.]





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BY

J. R. NORMAN.

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# XVI. REPTILIA AND BATRACHIA

ARRANGED BY

JOAN B. PROCTER.

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ARRANGED BY

W. L. SCLATER, M.A.

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# XVIII. MAMMALIA

ARRANGED BY

MARTIN A. C. HINTON.

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*Abrocoma budini* Catamarca (9) 5 p. 475; *famatina* spp. n. Famatina Range, Rioja (9) 6 p. 419, THOMAS Ann. Mag. N. H.

†*Alterodon major* gen. et sp. n., Jamaica (Pleistocene ?), ANTHONY Bul. Amer. Mus. N. H. 42 p. 474.

†*Clidomys osborni* p. 469, *parvus* p. 472 gen. et spp. n., Jamaica (Pleistocene ?), ANTHONY Bul. Amer. Mus. N. H. 42.

*Ctenomys sylvanus utilis* p. 193 Rio San Francisco, *juris* p. 194 near Villa Carolina, Jujuy subsp. et sp. n., THOMAS Ann. Mag. N. H. (9) 5; *coludo* Tinogasta, Catamarca p. 119; *occultus* Monteagudo, S. Tucuman p. 243; *famosus* Portrerillo, Famatina chain p. 420 spp. n., THOMAS Ann. Mag. N. H. (9) 6.

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